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PROCEEDINGS

NATIONAL ADVISORY BOARD FOR WILD FREE-ROAMING HORSES AND BURROS

160-32

SEPTEMBER 18, 19, 20, 1974
RENO, NEVADA

United States Department of the Interior
Bureau of Land Management

United States Department of Agriculture
Forest Service

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MEETING AGENDA

National Advisory Board
on
Wild Free-Roaming Horses and Burros

Holiday Inn
1000 East 6th
Reno, Nevada

September 18, 19, & 20, 1974

Sept. 18

7 a.m. to 5 p.m.	Field Tour

Sept. 19

8:30 a.m.	Introduction and Welcome - Ed Rowland, BLM Nevada State Director
8:45 a.m.	BLM Management Plans and Problems in Wyoming
9:45 a.m.	Break
10 a.m.	BLM Management Plans and Problems in Colorado
11 a.m.	Murderer's Creek Wild Horse Management Plan, Forest Service
11:45 a.m.	Lunch
1 p.m.	BLM Management Plans and Problems in California
2 p.m.	Forest Service Management Plans and Problems in Nevada
3 p.m.	BLM Management Plans and Problems in Nevada
4 p.m.	Public Comments
5 p.m.	Adjourn

Sept. 20

8:30 a.m.	Research Projects, Dr. Robert Ohmart, Arizona State Univ.
9:30 a.m.	Agency Reports (1) Report to Congress (2) Oversight Hearing (3) Research and Research Needs (4) Advisory Board Administrative Matters
11:30 a.m.	Adjourn

George L. Turnbull

Associate Director, Bureau of Land Management

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Board Members Present - September 19, 1974

Dr. C. Wayne Cook, Chairman

Dr. Roger Hungerford

Dr. Floyd Frank

Mrs. Velma B. Johnston

Mrs. Pearl Twyne

Mr. Dean Prosser

Mr. Ben Glading

Mr. Ed Pierson

Mr. Roy Young

Agency Personnel Present - September 19, 1974

George L. Turcott, Washington, D.C., Associate Director, Bureau of Land Management

E. I. Rowland, Nevada State Director, Bureau of Land Management

George D. Lea, Washington, D.C., Deputy Assistant Director, Bureau of Land Management (Representing the Secretary of the Interior)

Hallie Cox, Assistant Director, Division of Range Management, Forest Service (Representing the Secretary of Agriculture)

Kay W. Wilkes, Washington, D.C., Chief, Division of Range, Bureau of Land Management

Robert J. Springer, Washington, D.C., Bureau of Land Management

Betty Cullimore, Washington, D.C., Bureau of Land Management

Darwin R. Jensen, Lamoille, Nevada, Forest Service

John L. Lytle, Tonopah, Nevada, Forest Service

J. Richard Ward, Mountain City, Nevada, Forest Service

G. Glade Quiltan, Tonopah, Nevada, Forest Service

Orlo Johnson, Reno, Nevada, Forest Service

L. Christian Vosler, Burns, Oregon, Bureau of Land Management

Louis A. Boll, Bakersfield, California, Bureau of Land Management

Charles P. Douglas, Las Vegas, Nevada, National Park Service

Tom Ballou, Reno, Nevada, Department of Agriculture

Jim Blaisdell, Ogden, Utah, Intermountain Forest and Range and Range Experiment Station

Carl M. Rice, Sacramento, California, Bureau of Land Management

Charles Sundstrom, Reno, Nevada, Forest Service

Vernon E. Sylvester, Elko, Nevada, Forest Service

Chester Conard, Winnemucca, Nevada, Bureau of Land Management

Ralph C. Cisco, Reno, Nevada, Forest Service

Lester Fluckiger, Ogden, Utah, Forest Service

Dean Bibles, Susanville, California, Bureau of Land Management

Bill Cooperrider, San Francisco, California, Forest Service

Henry J. La Sala, Santa Fe, New Mexico, National Park Service, Southwest Region

Al Oard, John Day, Oregon, Forest Service

Don Gipe, Portland, Oregon, Bureau of Land Management

Russ Penny, Sacramento, California, Bureau of Land Management

Jesse R. Lowe, Cheyenne, Wyoming, Bureau of Land Management

Glen Stickley, Winnemucca, Nevada, Bureau of Land Management

R. T. Schultz, Ely, Nevada, Bureau of Land Management

Kenneth Weyers, Billings, Montana, Forest Service

Milford Fletcher, Santa Fe, New Mexico, National Park Service

Floyd Kinsinger, Denver Service Center, Bureau of Land Management

Phil Smith, Albuquerque, New Mexico, Forest Service

Gene Nodine, Battle Mountain, Nevada, Bureau of Land Management

John Boyles, Las Vegas, Nevada, Bureau of Land Management

Raymond Hoem, Winnemucca, Nevada, Bureau of Land Management

Peter G. Sanchez, Death Valley, National Park Service

John O. Hunter, Bandelier National Mon., National Park Service

Don Pomi, Carson City, Nevada, Bureau of Land Management

Ross Ferris, Reno, Nevada, Bureau of Land Management

Dwan Berreman, Reno, Nevada, Bureau of Land Management

Public Appearances - September 19, 1974

R. D. Ohmart, Tempe, Arizona, Arizona State University

Susan Woodward, Topok, Arizona, UCLA/ASU

Ward Brady, Division of Agriculture, Arizona State University

Dean O. Rhoads, Tuscarora, Nevada, University of Nevada

Tilly Barling, China Lake, California, Naval Weapons Center

Rick Seegmiller, Tempe, Arizona, Arizona State University

Deloyd Satterthwaite, Tuscarora, Nevada, Nevada Wool Growers

Ellis LeFevre, Caliente, Nevada, National Mustang Association

Bob Flournoy, California Cattlemen's Association

Glen K. Griffith, Nevada Department of Fish and Game

Pat Woodie, Howe, Idaho

W. Glen Bradley, Las Vegas, Nevada, University of Nevada

People Signing Visitors Roster - September 19, 1974

George Tsukamoto, Nevada Fish and Game Department

Mrs. Brown, Reno, Nevada

Mr. & Mrs. John Reilly, Sparks, Nevada, ISPMB

William Butler, Tempe, Arizona, Arizona State University

Loriene McElwee, Reno, Nevada

Clark Torell, Sunvalley, Nevada, University of Nevada

Dan Lechefsky, Reno, Nevada, Peavine Mt. Gang

Tina Nappe, Reno, Nevada, Foresta Institute

Dave Mathis, University of Nevada

Mrs. Dean Prosser, Cheyenne, Wyoming

William Freeman, Las Vegas, Nevada, National Wild Horse Association

Erma Lee Oard, John Day, Oregon

Dan Klebenow, Reno, Nevada, University of Nevada

Jean A. Rasmussen, Reno, Nevada, Reno Evening Gazette

Nana McElwee, Reno, Nevada

Davy Reynolds, Reno, Nevada

Dave J. Borough, Reno, Nevada, Sierra Club Organization

Ron Parry, Reno, Nevada, KOLO TV

Dawn Lappin, Reno, Nevada

Janet Black, Howe, Idaho

Chuck Kelly, Reno, Nevada

Matt Nifsch, California

Michael Pontrelli, Reno, Nevada

R. E. Eckert, Jr., Reno, Nevada

Chuck Richardson, Las Vegas, Nevada, Cummins Secured Sales

Larry Marshall, Orange, California, Western Livestock Journal

Kenneth R. Rogers, Caliente, Nevada, National Mustang Association

Yvonne Fisher, Reno, Nevada

Dan Hubbard, Sparks, Nevada

Norman Hall, Carson City, Nevada, Department of Conservation

Linda Zimmerman, Reno, Nevada

Doris Bennett, Gardnerville, Nevada

Nolan F. Keil, Reno, Nevada

Board Members Present - September 20, 1974

Dr. C. Wayne Cook, Chairman

Dr. Floyd W. Frank

Mr. Ben Glading

Dr. Roger Hungerford

Mrs. Velma Johnston

Mr. Ed Pierson

Mr. Dean Prosser

Mrs. Pearl Twyne

Mr. Roy Young

Agency Personnel Present - September 20, 1974

Hallie Cox, Assistant Director, Division of Range Management, Forest Service (Representing the Secretary of Agriculture)

George D. Lea, Washington, D.C., Deputy Assistant Director, Bureau of Land Management (Representing the Secretary of the Interior)

Kay W. Wilkes, Washington, D.C., Chief, Division of Range, Bureau of Land Management

Robert J. Springer, Washington, D.C., Bureau of Land Management

Betty Cullimore, Washington, D.C., Bureau of Land Management

Jesse Lowe, Cheyenne, Wyoming, Bureau of Land Management

Ron Pomi, Carson City, Nevada, Bureau of Land Management

Raymond Hoem, Winnemucca, Nevada, Bureau of Land Management

Gene Nodine, Battle Mountain, Nevada, Bureau of Land Management

Al Oard, John Day, Oregon, Forest Service

Chet Conard, Winnemucca, Nevada, Bureau of Land Management

Vernon E. Sylvester, Elko, Nevada, Forest Service

Lester Fluckiger, Ogden, Utah, Forest Service

Henry J. LaSala, Santa Fe, New Mexico, National Park Service

Charles Dorzle, Las Vegas, Nevada, National Park Service

Robert Waun, Santa Fe, New Mexico, National Park Service

John Boyles, Las Vegas, Nevada, Bureau of Land Management

Bill K. Cooperrider, San Franciso, California, Forest Service

Sam S. Rowley, Reno, Nevada, Bureau of Land Management

L. Christian Vosler, Burns, Oregon, Bureau of Land Management

J. Richard Ward, Mountain City, Nevada, Forest Service, Humboldt National Forest

R. T. Schultz, Ely, Nevada, Bureau of Land Management

Floyd E. Kinsinger, Denver Service Center, Bureau of Land Management

Ken Weyer, Billings, Montana, Forest Service

Peter G. Sanchez, Death Valley National Monument, National Park Service

Don Gipe, Portland, Oregon, Bureau of Land Management

Carl Rice, Sacramento, California, Bureau of Land Management

Milford Fletcher, Santa Fe, New Mexico, National Park Service

Jack Lavin, Reno, Nevada, Toiyabe National Forest

John D. Hunter, Bandelier National Mon., National Park Service

Jim Blaisdell, Ogden, Utah, Intermountain Forest & Range Experiment Station

Ross Ferris, Reno, Nevada, Nevada State Office, Bureau of Land Management

Dwan Berreman, Reno, Nevada, Nevada State Office, Bureau of Land Management

Orlo Johnson, Reno, Nevada, Toiyabe National Forest

People Signing Visitors Rosters - September 20, 1974

Pat Woodie, Howe, Idaho

R. D. Ohmart, Tempe, Arizona Zoology Department, Arizona State University

R. E. Eckert, Reno, Nevada, Agricultural Research Service

Tilly Barling, Naval Weapons Center, China Lake, California

W. Glen Bradley, Las Vegas, Nevada, Department of Biology, University of Nevada

Norman Hall, Carson City, Nevada, Department of Conservation

William Freeman, Las Vegas, Nevada, National Wild Horse Association

Mr. & Mrs. Ted Barber, Oravada, Nevada, Rancher-Pilot

Jeannie Rasmussen, Reno Evening Gazette

William L. Reavley, Sacramento, California, National Wildlife Federation

Sharley Reavley, Sacramento, California, National Wildlife Federation

W. J. Butler, Jr., Tempe, Arizona, Arizona State University

Mrs. Dean Prosser, Cheyenne, Wyoming

Dean A. Rhoads, Tuscarora, Nevada, Nevada Cattlemen's Association

DeLoyd Satterthwaite, Tuscarora, Nevada, Nevada Wool Growers

Tina Nappe, Reno, Nevada, Cason Foresta Institute

Ira H. Zint, Fallon, Nevada, Nevada Cattlemen's Association

Roger Van Tigeur, Denver, Colorado, American Humane Association

Joan Maguire Lamb, Las Vegas, Nevada

Ward Brady, Tempe, Arizona, Division of Agriculture, Arizona State University

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Chris Vosler - Oregon, BLM . . . . . Appendix No. 12

Dr. Robert Ohmart - Arizona SU . . . . . Appendix No. 13

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Proceedings of The National Advisory Board

for

WILD FREE-ROAMING HORSES AND BURROS

Reno, Nevada
September 18, 19, 20, 1974

Introduction:

The sixth meeting of the National Advisory Board on Wild Free-Roaming Horses and Burros was held in Reno, Nevada. The meeting was requested by Rogers C. B. Morton, Secretary of the Interior, on behalf of himself and Secretary Butz of the Department of Agriculture by memorandum dated June 27, 1974.

This meeting was scheduled in the State of Nevada so that the Board members were able to observe areas having a considerable number of wild horses.

The first day of the meeting (September 18) was spent on a field trip southeast of Reno in and around the Tonapah area to observe wild horses. The trip was by plane, helicopter, and bus providing the Board an excellent chance to observe the type of terrain and conditions where wild horses are found. The bus portion of the tour allowed the Board to see forage and water conditions on the ground.

The meeting was held at the Holiday Inn in Reno. The meeting was called to order at 8:20 a.m. by Chairman C. Wayne Cook, and thereafter was conducted within the agenda outline, except that an additional presentation was included by BLM personnel from the State of Oregon.

PROCEEDINGS

National Advisory Board

on

Wild Free-Roaming Horses and Burros

September 19, 1974

The meeting of the National Advisory Board on Wild Free-Roaming Horses and Burros was called to order at 8:20 a.m., September 19, 1974, at Reno, Nevada, by Chairman C. Wayne Cook.

Mr. Ed Rowland, Nevada State Director, welcomed the Board to Reno stating he hoped its visit would be helpful in gaining a better understanding of the wild horse management problems in Nevada and he would like to receive any suggestions the Board might have to improve the management situation.

Mr. George L. Turcott, Associate Director for the Bureau of Land Management, brought the Board and audience up to date on BLM operations in the wild horse and burro program. For the complete text of his speech see Appendix 1.

The Chairman introduced the following speakers. For the full text or outline of their presentations see appendicies 2 to 14 .

Mr. Jesse Lowe, Associate State Director, Bureau of Land Management, Wyoming
Mr. Dale Andrus, State Director, Bureau of Land Management, Colorado
Mr. Al Oard, Forest Supervisor, Malheur National Forest, Oregon
Mr. Lou Boll, District Manager, Bureau of Land Management, Bakersfield, California
Mr. Carl Rice, Range Specialist, Bureau of Land Management, California State Office
Mr. Dean Bibles, District Manager, Bureau of Land Management, Susanville, California
Mr. Orlo Johnson, Range Staff, Toiyabe National Forest, Nevada
Mr. John Lyttle, Range Conservationist, Toiyabe National Forest, Nevada
Mr. Darwin Jensen, District Ranger, Forest Service, Humboldt National Forest, Nevada
Mr. Ross Ferris, Wild Horse Specialist, Bureau of Land Management, Nevada State Office

Mr. Don Gipe, Range Conservationist, Bureau of Land Management, Oregon State Office
Mr. Chris Vosler, District Manager, Bureau of Land Management, Burns, Oregon
Dr. Robert Ohmart, Arizona State University
Ms. Susan Woodward, Arizona State University
Mr. Rick Seegmiller, Arizona State University
Dr. Ward Brady, Arizona State University

The following individuals made presentations during the time allocated for public participation in the meeting. The full text of their statements is on file with the Bureau of Land Management, the Agency retaining the official Advisory Board records. These records are available for public inspection in the Office of the Director, Bureau of Land Management, Washington, D.C.

A short summary of each individual's presentation follows:

Mrs. Bob "Tilly" Barling and Dr. Glen Bradley described the burro program on the Naval Weapons Center at China Lake, California. Dr. Bradley described a study being prepared on burros in the Amity Spring area of the Slate Mountain range. Seventy-five percent of the burros in the Slate Mountains are concentrated in the Amity Spring area. It is estimated there are 260-300 burros within an 8-mile radius of the spring or a minimum of five burros per section of land.

The number of burros far exceeds the grazing capacity and has caused severe damage to the natural resources through trampling, trailing, and grazing habits. It was suggested that total removal of burros might be the only management policy which would allow recovery of the existing natural vegetation.

Mr. Robert Flournoy, President of the California Cattlemen's Association, read resolutions from the Modoc National Forest Grazing Advisory Board and from the Susanville Bureau of Land Management District Advisory Board. Both resolutions sought control for excess numbers, giving protection to other multiple-uses, recommending amendments to the Act, and that the wild horse and burro numbers be held to 1971 levels.

Mr. Ellis LeFevre of the National Mustang Association described the NMA ranch at Barclay, Nevada, and told how the association was making improvements with water developments and improved pastures.

The improvements will provide additional feed for the horses on the ranch. He stressed the point that he wanted any excess horses provided with good homes.

Mrs. Pat Woodie of Howe, Idaho, presented the ranchers' version of the horse roundup. She stated much unfortunate and misleading publicity was put out prior to a public hearing that actually determined the horses to be privately owned animals.

She stated all other uses of the public lands are controlled. Wild horses, where they occur, should also be regulated. There is a severe lack of communication, Mrs. Woodie said, in being able to communicate the problems of wild horse management to the public, particularly those living in the Eastern portion of the country. Most people do not realize or are aware of the forage resource damage that can occur from uncontrolled numbers of wild horses or burros on public lands.

Mr. DeLoyd Satterthwaite, President, Nevada Wool Grower's Association and Vice President of the National Wool Growers Association, stated drought conditions existed in Nevada and forage was at an all time low. He called for control of wild horse numbers, stating his association is not for complete elimination of these horses but there is a need for control.

The Nevada Wool Grower's Association strongly urges the Advisory Board to do all in its power to help pass the recommendations for amendments to the Wild Horse and Burro Act and come up with a workable solution to solve the problems of wild horses and burros on Western ranges.

Mr. Dean Rhoads read a statement on behalf of the Public Lands Council. He reported that at the Denver meeting on September 17, the Council passed a strong resolution recommending amendatory legislation which would permit the Federal Agencies to use aircraft in rounding up wild horses and burros, and also to authorize the Secretaries to sell or donate, without restriction, excess horses or burros to individuals or organizations. He said these animals' forage consumption will reach such levels if uncontrolled to have highly detrimental effects on domestic livestock grazing and wildlife on the public lands.

Glen Griffith, Director, Nevada Department of Fish and Game Commissioners, read a statement urging Congress to approve the legis-

lative proposals of the Secretaries of the Interior and Agriculture regarding use of aircraft and motorized vehicles and the selling or donation of excess wild horses or burros.

A letter for the record from Mr. George Parman, Eureka, Nevada, stated wild horses should be placed on ranches purchased by wild horse enthusiasts where the horses could then be observed by the general public.

A letter from Jewelle Finley Parman explained, "There is no 'wild horse,' such as deer or buffalo." She belives production of food is more essential than sentiment over wild horses.

A letter by William Freeman representing the National Wild Horse Association of Nevada was read to the Board explaining some of its projects done in cooperation with BLM to repair and develop watering sites for wild horses.

The challenging issue stressed by the association was overpopulation and it supported the proposed amendments to Public Law 92-195. One area needing drastic management, according to Mr. Freeman, is the Nellis Bombing Range where much of the association's project work to help wild horses was conducted last year.

This statement submitted by Rob Flournoy was read into the record on behalf of the California Cattlemen's Association:

> The Association expressed its concern about the lack of adequate management of wild horse populations on public land and asked the Bureau of Land Management to actively and effectively control wild horse numbers on public lands. Grazing use of any kind should be practically managed to protect the quality of forage production, thereby increasing an ecological balance on the public lands. The association supported the proposed amendments to the Wild Horse and Burro Act of 1971.

A letter submitted by Mr. Roy Jesser on behalf of the Salmon River Cattlemen's Association, Inc., was read into the record. He said the association had invested in portable corrals, other equipment, and spent many hours in preparing blinds and traps to capture owned animals. He contended ranchers are being subjected to impossible restrictions in the capture of privately owned horses, both physically and economically.

The association requests the use of aircraft which can be the most humane method of gathering horses. The association asks that emergency procedures be initiated immediately to prevent mass starvation of horses and range damage.

A letter from William B. Wright, Jr., of Deeth, Nevada, was read into the record. He discussed how the present number of horses came into existence on the public lands. He felt the present claiming procedures were not fair to stockmen. Many other people and the U.S. Government have contributed to the number of privately owned horses now existing on the BLM lands. A simplified by "circumstantial evidence" type of procedure based on local history and testimony should and could be used to establish ownership of many unmarked horses "beyond the reasonable shadow of a doubt." Mr. Wright said there's no way to expect brands on all privately owned horses when we know they weren't coralled every year.

The meeting was recessed at 5:15 p.m.

The meeting was called to order again September 20.

The June 1974 Report to Congress by the Bureau of Land Management and the Forest Service was the next topic of discussion before the Board. Mr. Kay Wilkes briefly summarized the report for the Board. He also read the conclusions of Assistant Secretary Horton's presentation at the oversight hearing on June 26 as follows:

In conclusion, let us restate the problem of wild horses and burros. Their populations are growing at a rate between 18 to 30 percent, or 8 to 10 thousand new animals per year.

Their isolated herds are scattered over 50-60 million acres of BLM lands and 10 million acres of Forest Service land.

Unlike game animals, such as deer and elk, wild horses and burros have no natural predators nor are they subject to sport hunting as a means of population control.

Processing claims for private ownership required under the Act has been difficult or impossible because adjudication requires physical inspection.

This requires a roundup which now can be conducted only by saddle horse--an expensive, inefficient, and highly uncertain operation.

The problem of determining the ownership of these animals is compounded by the problem of controlling population growth. Neither can be solved under authorities in the present Act.

The Act does not now provide for the transfer of excess animals to individuals or organizations without a private maintenance agreement.

Private individuals or parties have not been willing to adopt wild horses and burros under these conditions. Our past experience indicates that it is highly improbable that 8 to 10 thousand horses a year would be willingly adopted by private individuals under the present authorities.

The herds are now actively growing and they will continue to grow unless we adopt different, more adaptive and enlightened management practices.

Without natural predators, and with finite forage capacity, the control of population growth has two primary solutions.

It can be provided by the humane and more flexible methods which we propose to the Committee today.

Or it can come from overgrazing, famine, sickness, emaciation and possible starvation.

The latter alternatives are grim, harsh, inhumane and repugnant.

They are also unnecessary.

This Administration is deeply committed to the cause and the protection of the wild horse--as a special population to be protected and preserved, as an expression of the spirit of the old West, as a continuing symbol of the heritage and generosity of our Western lands.

To protect the wild horse and burro, the objective is clear. We must protect it from itself.

We must do so in a manner that also protects the competing species in its natural environment and that respects the necessary balance and the range on which it depends.

We must do so in a manner compatible and consistent with the intent and understanding of the Congress.

We congratulate the Committee for scheduling hearings on this challenging, complex and difficult issue.

The research program for the 1975 and 1976 fiscal years was outlined by Dr. Floyd Kinsinger from the Denver Service Center of the Bureau of Land Management. The BLM has negotiated two contracts with Arizona State University for studies on burros. These contracts will cost approximately $35,000 in the 1975 fiscal year. In FY 1976, it is anticipated approximately $135,000 will be used for wild horse and burro research.

There was considerable discussion by Board members on whether the amount of research by BLM was sufficient and results could be obtained in time to help solve existing problems in wild horse and burro management. Forest Service is requesting $450,000 for wild horse and burro research studies. A portion of this may apply to BLM lands.

The Board proposed the following resolution and recommended:

> That the Interagency Forest and Range Experiment Station request $450,000 for research and that BLM request adequate funding for cooperative research; that joint BLM-FS management research be undertaken including control methods. Further, that mechanical equipment be released for experimental purposes in both cooperative and in-house research, and further, that research efforts be centered on national resource lands.

This recommendation was passed unanimously.

Dr. Floyd Frank made the observation that the 1971 Wild Horse and Burro Act gave the animals special status in that they are the only large herbivorous animal that is not subject to some rather automatic population control. Fish and game departments increase or decease the number of wildlife taken through hunting. Domestic livestock numbers are controlled. The world is reported on the verge of a food shortage. Food reserves and fertilizers are limited. Cereal grains will be consumed directly by humans and society will not longer be able to afford the luxury of putting cereal grains into animals to produce red meat. This will change the eating patterns of the American people. He stated in his prognostication that poultry, pork, and grain fed beef and lamb will be priced out of the reach of the average consumer. The animals that people depend on for meat will be herbivores. In other words, primarily cattle and sheep. This will mean that every citizen will have a major stake in seeing that our Western rangelands are stewarded in a manner which will result in (1) minimum ecological damage and (2) maximum utilization of forage for red meat production.

It was stated that anyone who has really studied the Wild Horse and Burro Act recognizes that until we either modify or repeal it the Agencies are going to have some serious difficulty in managing public lands in the West in a manner which is in the best interest of the American people.

This Board cannot allow itself to be dissuaded by special interest groups on either side from handling the administration of the Wild Horse and Burro Act in the best interest of everyone.

Considerable discussion followed on population dynamics and the effectiveness of using helicopters for capture purposes.

A rather long resolution was then proposed covering the points just discussed. Several amendments were added.

The use of motorized equipment and aircraft was deleted from the original resolution on the objection of one member. The result was the two recommendations being acted upon separately:

(1) WHEREAS, during the 3 years that the Wild Horse and Burro Act of 1971 has been in force populations of these animals have increased dramatically; and

WHEREAS, these increases in equine populations have resulted in overgrazing and severe damage to the ecological balance of the public lands and whereas if populations are allowed to continue to increase this damage will become extreme; and

WHEREAS, the impending worldwide food shortage gives emphasis to the urgent need to manage and conserve the Western rangelands as a resource for food production; and

WHEREAS, certain provisions in the Act have the effect of severely restricting the Federal Agencies in effectively keeping horse numbers at a level which will prevent deterioration of the ranges.

NOW, THEREFORE, BE IT RESOLVED: That the National Wild Horse and Burro Advisory Board urges the Secretaries, and through them the Congress of the United States, to modify the Act in a manner which will:

Authorize the Secretary to sell or donate excess animals to individuals or organizations on written assurance that such animals will receive humane treatment; place a statute of limitations on

claims or ownership of branded or unbranded horses except those animals which entered the public lands after the effective date of these changes; give serious consideration to the use of intensive management areas as a management tool for these animals with appropriate restitution for the grazing privileges lost.

Passed unanimously.

(2) WHEREAS, helicopters are recognized as an essential and humane tool in management of wildlife throughout the world.

NOW, THEREFORE, BE IT RESOLVED: That the National Wild Horse and Burro Advisory Board urges the Secretaries, and through them the Congress of the United States, to modify the Act in a manner which will allow the use of motorized equipment and helicopters under direct supervision of the Secretary or duly authorized official or employee of the Departments in management of wild horses and burros.

Mrs. Johnston dissented. (See minority report, Appendix 19.)

Based upon the field trip on Wednesday and the Agency reports, the Board took up a discussion on disposal of excess numbers of wild horses and burros. The lack of action resulting from the preparation of the Report to Congress on Wild Horses and Burros submitted to Congress in June by the Secretaries of the Interior and Agriculture indicated to the Board a more positive method of exposing the situation and problems facing the managing Agencies to congressional members was needed. To alert Congress further to the immediacy of controlling wild horse and burro numbers and to expedite the removal of privately owned animals from the public lands, the following recommendation was drawn up:

WHEREAS, the National Advisory Board for Wild Free-Roaming Horses and Burros has made several substantial recommendations for amendment to Public Law 92-195 to the Secretaries; and

WHEREAS, the Secretaries have carried our recommendations to Members of Congress at the oversight hearing held on June 26, 1974; and

WHEREAS, Congress has not shown any disposition toward implementing these recommendations.

NOW, THEREFORE, BE IT RESOLVED: That the National Advisory Board requests that the Secretaries ask the Chairmen of the Interior and Insular Affairs Committees of both the U.S. Senate and House of Representatives to call a field hearing on the subject of population increases of the wild horses and burros, preferably here in

Reno, Nevada, at the earliest possible date; and that copies of this resolution be sent to all members of the above-mentioned congressional committees.

Passed unanimously.

The Secretaries of the Interior's and Agriculture's plan to rotate Board membership was reviewed. With one exception all of the members expressed a desire to serve at the discretion of the Secretaries. It is planned to replace three members of the Board for the 1975 calendar year. The Board will organize and select a chairman at the first meeting. All members will be contacted prior to the meeting for possible agenda topics.

The subject of range deterioration and the possible harassment of wild horses and burros by off-road vehicle traffic was reviewed. The Board was made aware of presidential Executive Order 11644 of February 8, 1972, regulating and restricting the use of off-road vehicles on public land. Both the Forest Service and the Bureau of Land Management have issued regulations implementing the provisions of that Executive order.

The Bureau of Land Management is lacking enforcement capability, manpower, and funds at the present time to fully carry out this Executive order and that everyone certainly recognized what needs to be done. The Forest Service is well along in implementing its program.

The following resolution was made and passed unanimously by the Board:

> WHEREAS, it is necessary to protect the habitat of the wild horses from off-road vehicle use, I move that the Board suggest to the Secretaries that enforcement procedures be established that will enable the Bureau of Land Management to properly protect the public lands in the public interest.

I certify that I attended the proceedings of the National Advisory Board on Wild Free-Roaming Horses and Burros herein reported, and that this is an accurate summary of the matters discussed and the recommendations made.

Dec. 14 1974
(Date)

C. Wayne Cook
C. Wayne Cook, Chairman

REMARKS OF GEORGE L. TURCOTT, ASSOCIATE DIRECTOR
BUREAU OF LAND MANAGEMENT

Mr. Chairman, Advisory Board members, ladies and gentlemen.

I am pinchhitting for Director Berklund, today. I have attended more than half of your previous meetings and have been involved with this wild horse and burro problem for many, many years. I had convinced the Director that he should come and meet with you this time because not only of the importance of the matters that are always discussed by this Board, but at this particular time as we really get into more serious discussions about population control that he should be here. But he was preempted at the last, so I've come again and also it gives me a chance to come home again.

Your activities, deliberations, and recommendations have been a great help in formulating the wild horse and burro programs for both the Bureau of Land Management and the Forest Service. Your services and advice to this Bureau and to the Department have been greatly appreciated. You have been a dynamic and responsive Board.

In previous meetings, we have stressed formulation of regulations, environmental impact statements, management criteria relating to specific ranges, wild burro programs, research needs, and a progress report to the Congress with legislative recommendations.

The tour yesterday and our meeting today emphasize resource management problems, particularly those associated with population control.

Now, I want to talk about several matters relating to the wild horses and burros that are of primary concern to us and to you as Board members. These matters relate to the recent recommendations made to Congress for legislative changes.

The roundup and ownership determination of claimed horses is progressing very slowly or going by default because of required constraints on presently authorized methods of gathering. We will discuss this in more detail later today.

We have removed some excess horses from national resource lands without the use of aircraft, but we cannot see continuing to do so over vast expanses of rangelands because of the inefficiencies and nonproductivity, high manpower requirements and their related costs.

Aircraft and motorized equipment properly operated is a humane method for capturing private horses and, when necessary, the wild horses as well.

We also believe that we must receive approval for our recommended change in legislation so that we can donate or sell excess animals to interested parties without restrictions. The Secretary requested the wording "without restriction" because we cannot be responsible ultimately for every horse or burro that may be given away or sold. Also, the problems of intra and interstate transportation, and lack of desirability of many of the animals. This matter is a serious problem and will become increasingly so in terms of the numbers of animals that must be removed.

In June, we reviewed these two critical issues with Senator Jackson and the Interior and Insular Affairs Committee during the oversight hearing.

To date, no legislation incorporating our suggestions has been introduced. We are considering two additional changes that might help to alleviate what I think is the basic problem raised by our suggested legislation. These are, first, inclusion of a clear statement that aircraft and motorized vehicles may be used only under direct supervision of officials of the Department; and second, the establishment of a statute of limitations on filing of claims. These changes would permit more effective planning and management by assuring timely filing of claims and would also serve to guarantee that use of motorized vehicles and aircraft in the claiming process would be undertaken under the strictest supervision.

I'm going to digress from my prepared statement to make myself clear. The two big proposals made last spring in the proposed legislation, of course, called for the legislative authority to use aircraft and motorized equipment because we can't find any other way to gather claimed animals and we can't, of course, find any other way to manage the wild animals. Second, we need some way to clearly be able to sell or donate, as a first priority donate, these animals in terms of a quit claim deed process and the Government would be relieved of its responsibility.

I've been to several meetings lately, in fact I was out in Reno just a month ago when the wild horse and burro problem was taken up by the Public Lands Council. I've been to other meetings at which wild horse people have expressed to me a very fundamental fact. There seems to be fear that the way the regulations are interpreted by the lawyers, the BLM regulations, that even though there was a 90-day claiming period in the regulations as finally promulgated, that as a matter of law there is nothing to prevent anyone at any time, since we're way past the 90-day claiming period, from coming in and claiming their private property.

So, frankly, the wild horse enthusiasts are, as they expressed it to me, very frightened that if the use of motorized vehicles and aircraft were authorized by law, the Bureau and Forest Service would be deluged with claims for the many, many animals that are out there once we had a viable means of their capture and management.

Number two, if there's anyone who doubts the motives or intentions of the Bureau of Land Management, or me, myself, that I do believe in the forepart of the Act that there should be a viable population of these animals on the public ranges as part of our national heritage, as part of the natural landscape, as part of our natural ecosystem, and all the rest of it, then I cannot see why, if it's legally possible to do it, we could not put a statute of limitations in for claims. If there are any livestock people in this room, I've told them much more pointedly at a meeting a month ago at which they dominated the audience that that's exactly what I meant. Of course, there would have to be a provision that any animal that escaped onto the public lands administered by this Bureau after the date of a statute of limitations for claiming were filed, an opportunity would have to be given to gather it. That would be an escaped animal after the date.

That's kind of a middle-of-the-road approach, in my view. To me it's eminently fair. The lawyers are scratching their heads and this is not a Departmental proposal, it's merely a Bureau proposal about a statute of limitations.

Frankly, another reason I'm not too afraid of it if it's legal because since the day of the Act and as time goes on and on I can't help but think that the fact of an ever-increasing trespass charge on any claimed animals that were gathered is mounting and when this charge gets up over $200 on an animal, I can't think, really, that there would be much of an overwhelming claiming process to take hundreds of animals off. That's just the practicalities of life.

Maybe you'll want to start discussing this. I will say this, that I recommended to the Secretary of the Department of the Interior that this four-part proposal, the two parts that were recommended prior and these latter two parts I've just discussed, be submitted formally to the House of Representatives and the Senate with what we call a Speaker letter, i.e., the formal submission. That means that Office of Management and Budget, and, of course, we're facing termination of the 93rd session of Congress, even with a lame duck session, but I did recommend it formally this week if nothing else to get the thing out and flushed out in the open. I have serious doubts that they will send it up formally, but I was allowed to discuss it informally here.

Hopefully, with this flexibility, a confrontation between these particular interests may be avoided. Without this flexibility, I believe that range conditions in some areas will get much worse because of competition for forage between wild horses and burros, wildlife, and livestock. It is possible that the basic soil resource and vegetation in these areas could be damaged beyond recovery or become so deteriorated that rehabilitation would be "long and costly."

As an update on the Howe, Idaho horse roundup, a State brand inspector issued a decision on September 3 declaring that the horses involved in the roundup were privately owned animals. Max Palmer of Sugar City, Idaho, was determined to be the owner. Other claimants to the horses were Senator Abourezk and Congressman Gude. If Senator Abourezk and Congressman Gude do not appeal the State brand inspector's decision under Idaho State appeal procedures, we will release the horses to Max Palmer.

Only then will the horses in custody of BLM and Forest Service be released to the claimant if he is still determined to be the rightful owner.

We are anxiously awaiting a decision on the New Mexico burro case challenging the constitutionality of the Wild Horse and Burro Act. The case is scheduled for hearing before a three-judge panel later this month.

As you remember, the State, through its Livestock Board, authorized the roundup of some 19 burros by private parties in February 1974.

It boils down to the fact that the Livestock Board contends the State law clearly gives New Mexico full authority over unbranded and unclaimed horses and burros within its boundaries. The Federal Government contends, of course, that BLM and the Forest Service have jurisdiction over national resource and national forest lands as directed by the Wild Horse and Burro Act.

I can certainly appreciate the concern of the Livestock Board in meeting its responsibilities under State law.

This New Mexico case and the roundup of horses in Idaho have slowed down our processing of ownership claims and the gathering of private animals from the public land. Authority to gather 8,189 animals has been issued. After 66 roundups and many man-days of effort, only 635 horses and burros have been gathered. Of the total, 617 were determined to be private animals. The remaining horses were turned back onto the open range.

At this meeting, BLM representatives from Nevada, Oregon, California, Colorado, and Wyoming will discuss management problems in their particular State and present their views on management proposals. Forest Service representatives from Oregon and Nevada will discuss their horse and burro activities. Their problems may or may not be similar to those encountered by BLM. They are, however, equally important.

As we intensify our efforts to conduct inventories, we find more horses and burros on national resource lands than previously estimated. The full impact of wild horse and burro management will not be realized until we have fully analyzed all of the resource values within a given planning unit and established a management goal for the unit. We know that one resource cannot be developed to its full potential while we ignore possible conflicts with other resource uses. Planning, like politics, is a matter of compromise, give and take. But, if we have full participation in our planning process and sound recommendations from the public, we feel that we can assure the people of the United States that their public land and resources are used wisely.

Of all the uses or users of the public land, the livestock industry will feel the greatest impact with full implementation of the wild horse and burro program. This impact may be reflected by allotment boundary modification, forage allocation, and constraints on fencing and other facilitating projects.

In some situations wild horses and burros may have to be relocated or eliminated from areas when agreements cannot be negotiated with private landowners. This will be particularly true in checkerboard areas where public land cannot be managed independently.

As required by the Act itself, a program is underway to inform and to help educate the public about wild horses on public land. It is our intention to factually portray this rather exciting story and to explain our responsibility in the overall management.

Public involvement and understanding is important to any such program. As an example, less than a week ago, BLM held a roundup of horses at Kiger Gorge in Oregon. It was held at the request of private landowners who wanted the horses off the land.

The public was informed in advance about the roundup. Interested persons and the media were invited to attend. It was our intention to show the planning and measures taken to properly conduct this roundup.

I understand the three major television networks filmed the event. In all, 35 press people were present to chronicle the roundup. Also present were representatives from the Humane Society and the American Horse Protection Association, with several actually accompanying BLM personnel on their own horses.

A thorough briefing was held one day prior, citing objectives and also pointing out the potential hazards that exist in working with wild animals.

It was planned that the gathered horses would be offered to the public this week under the Act's maintenance provision. These horses were to be entrusted to individuals who have expressed an interest in the animals.

As might be expected, the roundup provided fewer horses than anticipated--eight out of roughly 100. It was conducted without incident.

However, because of the small numbers gathered, a second roundup took place Tuesday of this week. Here again, the Humane Association and the AHPA members were present.

This roundup was not without incident. A band of 12 horses being worked into the corral reacted far differently than those gathered a day earlier, and broke through the fencing. One wild animal and one riding horse was injured and had to be disposed of--10 escaped. The rider was not seriously injured.

This situation illustrates, better than any hypothetical case, the inherent problems in the management of wild, feral horses under the present legislation.

There is no assurance that under any gathering methods, mechanized or otherwise, that wild horses or burros will react in a similar manner. This is as true today as it was in the days of the frontier West. However, this does not minimize our responsibility as we try to face up to the problems and opportunities as they exist to preserve a delicate environmental balance.

As I have explained, we strongly want the public to know, as completely as possible, what it's all about.

In the months and years ahead, we expect greater attention to be given to the serious range problems we face on the national resource lands. Such actions will include increased supervision of range use and such adjustment of grazing privileges to bring authorized grazing use in balance with carrying capacity of the range. In doing this, we must consider a realistic apportionment of forage for use by wildlife and wild horses and burros. The need for such action has been stressed continually in our range program evaluations.

Recently, we released a special evaluation report on range conditions in Nevada that points out many of the problems associated with the livestock grazing program.

The Bureau, in response to the Senate Interior Appropriations Committee requests, will submit a report at the end of this year highlighting the current condition of the range and associated management problems. We will also include a realistic budget and manpower estimate that reflects what is needed to correct the management problems and restore the rangelands to a satisfactory condition. An important part of this report will pertain to wild horse and burro management needs.

Your continued advice and recommendations can significantly influence our management program in the years ahead. So will the recommendations from other advisory boards.

In previous meetings, we discussed the need to keep this Board dynamic and progressive. Our proposal was to rotate membership periodically. As a result, three new members will be added next year. You were all asked if you were interested in continuing to serve as Advisory Board members. We have received written expressions from some of you. We would like for the rest to respond before the meeting adjourns. In rotating membership we will lose experience and expertise but rotation will add new and different views to the Advisory Board--allow more individuals to participate and advise the managing Agencies, but we will still maintain continuity with six experienced members.

In closing, I want to assure you again that your input and advice is always needed and always welcome. Everyone here has contributed and we look forward to excellent working relationships in the future.

Thank you.

BUREAU OF LAND MANAGEMENT

WYOMING STATE REPORT

Meeting of National Advisory Board

on

Wild Free-Roaming Horses and Burros

Reno, Nevada - September 18, 19, and 20, 1974

We appreciate the opportunity to present a statement on the management status of wild free-roaming horses and burros in Wyoming. The suggested items for discussion are problems of management on checkerboard land pattern areas and those associated with the animal claiming process. Before addressing these issues, however, a general description of animal numbers, distribution and area habitat is in order.

Most of the free-roaming horses and burros in Wyoming are located in the southwest quarter of the state. Small herds run in several areas in central Wyoming near Green Mountain and in the Big Horn Basin. Horses have used these areas since being introduced by man. Through this long history, numbers have fluctuated in response to many factors. The growth of the livestock industry in the West, the loss of military markets following World War I, the abandonment of farm horses owing to mechanization, the extensive gathering of horses for commercial meat purposes, the periods of extreme weather and forage conditions, and the recent passage of legislation to protect and manage wild free-roaming horses have all contributed in some way to changing populations. As inventories became more systematic and thorough, it became evident that earlier estimates of numbers were too conservative.

The numbers estimated in December 1971 were 4325 horses. The current inventory as of August 1974 is 8163 horses based on information derived from actual counts.

	Dec. 1971	March 1974	Current (Aug. 1974)
Rawlins	544	1799	2250
Rock Springs	2524	3629	5431*
Worland	217	331	423
Casper	0	60	59
Statewide Total	4325	5819	8163

*Includes 20 Burros

The best counts were made by helicopter; however, when any disparities occurred as to numbers in large herds, the more conservative figure was used.

Current inventories are now being done with more accuracy, attributable to greater experience and intensification of comprehensive field work.

The habitat of the 8100 horses is generally in areas remote from towns, highways and other developments. The majority of the Wyoming horse herds are rarely seen by humans owing to the wildness of the animals and the vastness of the land area. These areas generally encompass 1/2 to 1 million acres where no fences, buildings, or human habitation exist. Access into the areas is variable and is usually on county roads, truck trails, or seismographic trails.

The vegetation basically consists of sagebrush, saltbush, wheatgrasses, cheatgrass and forbs typical of semi-arid regions. The

topography of these areas is rolling to rimrock country interspersed with large open valleys in the southern part of the state. The north central areas are characterized by benches not readily accessible to cattle.

So far, 26 herd areas have been separately identified that range on approximately 4 million acres. Most of this area is unfenced. These use areas are not stable because of the change in the leadership of the herds, availability of water, natural migration patterns and movement forced by weather conditions.

Reproduction for 1974 was high by actual count and even after applying adjustment for death loss the first year, numbers have increased significantly. Several factors account for the high average colt crop.

1. Last summer during breeding season, the horses were in good condition, thus increasing fertility.
2. An abundance of feed was available in the horse use areas because of livestock users taking between 50 to 60 percent non-use.
3. Within the increasing herds, the age ratio is younger, which yields a larger number of young fertile mares and a smaller percent of older post-productive mares.
4. Normally these areas receive 6 to 10 inches of snow which remains on the ground for extensive periods because of low temperatures, making feed more accessible.

Numbers projected to 1978, after adjustments, are 15,000 horses.

	Current Number	1974 Colt Crop % Actual	Adjusted	Colt Crop % Uses in Projection	Numbers Projection '78*
Rawlins	2,250	30	20	20	3,500
Rock Springs	5,431	37	27	20	10,690
Worland	423	10	10	10	574
Casper	59	—	--	--	10
Wyoming	8,163				14,774

*Does not include claimed horses or estimated branded horses.

The general management problems are that horse numbers are increasing at a much higher rate than the Bureau's capability, thus far, to implement control measures. So far, Wyoming is not experiencing a serious forage problem. The reason for this is that many livestock operators are requesting conversion of sheep to cattle use and are taking non-use while awaiting the completion of resource studies and environmental analyses. If the sheep (active) non-use, amounting to 100,000 AUMs, in southwestern Wyoming were activated, it would immediately create a critical overgrazing situation.

Domestic horse use has been stopped in wild horse areas by virtue of ranchers not applying to turn out, thus the Bureau is not licensing horses in the herd areas.

Day-to-day problems are studs stealing privately owned mares, which is indicated by an increasing number of complaints. So far this year, studs have been successful on five occasions.

Highway hazards have been identified in the Baggs area, north of Rock Springs, and north of La Barge, Wyoming. At least 10 horses were hit by automobiles this year.

Recreationists have complained of wild horses chasing them. On the average each district gets one or two calls a week relating to horse problems.

To the extent possible, unauthorized horse gathers are being monitored through cooperation of State Brand Inspectors (155 inspectors in 7 districts throughout the state) and cooperation of Highway Patrol who stop all trucks hauling horses to examine brand certificates. Despite this assistance and surveillance by Bureau employees, some unauthorized capture of horses may be occurring on Natural Resource lands in Wyoming. A reported 75 to 80,000 horses are slaughtered each year at North Platte, Nebraska, only 160 miles east of Cheyenne, and Nebraska does not require proof of ownership. BLM has received excellent cooperation from the State Brand Inspectors under the leadership of Dean Prosser who is on your Board.

Two other fundamental problems relate to land pattern and the claiming process.

The checkerboard lands in Wyoming extend for 250 miles and provide habitat for free-roaming horses on approximately 2.8 million acres of private and public lands. This area is principally unfenced and is grazed by sheep in the winter but some is slowly being converted to summer cattle use. The area is also an important antelope and deer winter range.

Future use by free-roaming horses on the checkerboard land areas may depend on resolution of legal questions before it can be considered as permanent habitat for the existing 3,900 free-roaming horses, or some other number decided for the future.

The basic question of "who" owns the wild horse has to be answered first. A department solicitor on June 11, 1971, issued an opinion that no one, including the Bureau, owns a wild animal as such. Further, the opinion holds that wild horses on private lands are not under the jurisdiction of the Department. As custodian of the horses, this raises the question of the Bureau's liabilities in the checkerboard areas for forage consumed, for tourist injury, for property damage, for situations where domestic horses are run off by wild stallions, and for public hazards on highways.

Attention is now directed to the regulations under the Act with respect to removal of animals from private lands which state:

> "The authorized officer shall remove, as soon as he can make the necessary arrangements, wild free-roaming horses and burros, from private land at the request of the landowner where the private land is enclosed in a legal fence. A legal fence for this purpose is one which complies with State standards and specifications. In no fence districts or other areas where the private landowner is not required by State statute to fence the private land to protect it from trespass by domestic livestock, the authorized officer shall, as soon as he can make the necessary arrangements, remove wild free-roaming horses or burros from such private land at the request of the landowner."

The Bureau has no authority to go on private land to gather horses, particularly if the landowner is not cooperative.

Since the Bureau is responsible for wild horses, the private landowner can require BLM to remove the horses from his land.

Under the "open range law" as in Wyoming, the question is posed what is the Bureau responsibility under the Wild Horse Act, as managers of the animal, for constructing a legal fence to stop trespass on private lands?

Almost 50 percent of the free-roaming horses currently in Wyoming are grazing in the checkerboard area; therefore, "cooperation" will have to be the key to the continued existence to wild horses on these areas. Only one industry group in the checkerboard area, thus far, has indicated a willingness to discuss a possible cooperative agreement with the Bureau to manage a "reasonable" number of wild horses on their allotment. This group is the "Rock Springs Grazing Association," and this is their situation.

Number of shareholders - 30

Acreage:	Public	1,127,129 acres
	Private	1,116,569 acres
	State	38,285 acres
	Total	2,281,983 acres

Number livestock:	Qualifications
Sheep	110,000 - Dec. 15 to May 31
Cattle	3,000 - Summer season

Currently the active use is 23,000 AUMs and non-use is 68,506 AUMs.

If the assoication should activate their livestock use and no agreement is reached as to wild horse numbers, the Bureau will obviously be confronted with both legal and forage management problems.

The fencing controvery in southwest Wyoming has received much publicity. The area east of Rock Springs almost to Rawlins and 40 to 50 miles north has almost no fences. Within this area is the Red Desert. Special interest groups have brought pressure to have this area set aside (even though half of the checkerboard is private land) as an antelope range. The private land and NRLs are grazed by sheep and cattle, along with large numbers of antelope and lesser numbers of deer, elk and wild horses. The planning decision is to consider each fence on a case basis but with emphasis on no fencing.

BLM is coming out with a new fencing policy, following a recent Regional Fencing Workshop, which will establish criteria and guidelines for fencing critical wildlife areas. Hopefully, the environmental analysis and planning system process will indicate management alternatives and the direction for use decisions that will be most equitable to all user and interest groups. Livestock operators have the legal right to fence private lands to protect their property. The key to implementing sound wild horse management on areas of interspersed ownership is to win the cooperation of all interests. However, such cooperative agreements are binding on the Bureau to perform.

The determination of a balanced mix of uses between livestock, wild horses and wildlife, the decisions to allow conversion of sheep winter use to cattle summer use that will necessitate additional fencing, the approach to discharging Bureau's legal responsibility to control trespass on private lands without benefit of efficient and effective methodology are all questions that must be answered before cooperative agreements

can be negotiated. When considering the current legal and technical obstacles, the Bureau would be placing itself in an untenable management position at this time by entering into agreements when it cannot fulfill the terms.

The status of the claiming process is that 31 claims were filed for 782 horses: 16 claims range between 1 to 10 horses each, 11 claims range between 11 to 48 horses each, and 3 large claims of 71, 150 and 266 horses each with one claim for an unspecified number.

The Bolten Ranch claim was for 150 head, but by actual count only 70 head have been found. The Bolten claim involved two gathers which is discussed later. Two other claims have been processed involving 1 (one) horse and 18 horses.

Conservative estimates are that at least 1,500 claimable horses were not claimed.

A rancher near Big Piney purchased and received a "Bill of Sale" 10 years ago for 50 head of horses on NRL on the Desert Unit north of Rock Springs. The horses were not licensed and now he will not file a claim as the horses are not worth the cost of the trespass fee. This 50 head and their offspring now account for most of the 217 head in this area.

The largest number of claims are in the Rock Springs District (15). The problem of processing claims in the Rock Springs District and to a lesser extent in the other districts is the lack of facilities (fences and catchments) to trap the horses. In most cases herds of 20 to 150 will need to be gathered to catch the 1 to 10 head claimable.

Another problem is associated with public lands adjacent to the many small communities in Wyoming. For years town people have been turning out horses of all sorts. One such town is Midwest, Wyoming, where 59 horses were inventoried and most are found to be unbranded. No claims were filed; however, the local people are registering complaints over contemplated trespass and management action relating to unbranded horses under P.L. 92-195.

Problems connected with gathering claimed horses can best be illustrated by a recent experience on the Bolten Ranch (now Tuttle Ranches) located southeast of Rawlins. The owner entered into a contract with Harry Vold last spring to gather all horses on the ranch. The Bureau analyzed the gathering plan and after consultation with the State Brand Inspector and issuing public notice authorized the gather with use of saddle horses to begin May 6, 1974.

Personnel involved in the gather were Harry Vold and 4 riders. All of these individuals are experienced horsemen. Harry Vold is a rodeo stock contractor and horse grower. The crew came well equipped with 28 saddle horses in good physical condition. After learning the country (terrain, fencing, distribution of horses), the crew repaired fences, removed some

fencing in a small canyon and staked 10 head of saddle horses as decoys just outside the opening. They tried to gather bands of various size and guide them through the opening out of the big pasture into a smaller, lower elevation pasture. It was antipicated that horses being unfamiliar with the new area could be driven to the corrals. This was attempted several times over 3 days with no success. As the horses neared the fence they sensed the danger and turned, running back through the riders. One observer concluded that 50 mounted men could not have turned these horses back. As the gather proceeded, 3 of the slower horses were successfully roped and taken.

The crew spent three 12- to 14-hour days (May 6th thru 8th) trying to gather the horses. Crew and saddle horses were pushed to the limits of endurance and the futility of the effort became obvious. On the evening of May 8, Mr. Vold decided to cease the operation. All 28 head of saddle horses had been ridden to the point of exhaustion (some were lame) and he did not want to permanently cripple or kill any of his saddle horses.

Three horses and four colts were corralled. The mature horses included one yearling filly, one 2-year-old stud, and one 12-year-old saddle broke gelding. Two abandoned colts were located and followed the riders into the corrals on the evening of the first day's effort. Two others were picked up by the riders on the second and third days and taken to the ranch headquarters.

The terrain on this range is such that the placement and concealment of traps is of dubious value. The pastures are quite large necessitating long rides with saddle horses before encountering the claimed horses. The

open terrain and the familiarity of the horses with the fencing and terrain, coupled with the fact that numerous individuals have run these horses in the past, made the gathering of the animals on horseback almost impossible.

Using saddle horses resulted in an exhaustive experience for the claimed horses, the domestic stock, and the crew involved. The rough terrain and the expanse of the area compelled the riders to change horses as many as three times a day.

The Bolten Ranch crew was experienced, qualified, and well-equipped, and yet they were unsuccessful and had to give up the contract.

Later in the summer (1974) Bolten Ranches entered into a second contract with a Mr. Hertzog to round up the horses.

Using the experience from the gather in May, Mr. Hertzog developed new ideas and plans for gathering these horses. The plan was based upon a "low key" type of roundup. Running of horses was going to be held to a minimum, and catchments were planned on the back side of hills along fences. The plan was to trap and rope the "renegades" first. Then the younger horses and mares would be trapped.

With this in mind, the district manager approved the gather which commenced August 5, 1974.

Mr. Hertzog roped a large stud (attempted roping several others first), but in so doing his saddle horse was thrown on his back. Mr. Hertzog, possibly one of the most knowledgeable horse wranglers in a three-state area, sustained serious internal injuries.

The injury stopped the roundup until August 20. When work resumed, the plan for gathering these horses began to take shape and in the next 4 days 45 head of horses were gathered. Within another week they had

gathered another 5 for a total of 52. The gather ended on September 6 at which time 68 head were captured and none of these were "slicks" or wild horses.

The success of the Hertzog gather over the Vold gather was primarily due to the patience applied by Hertzog in relation to the "fast riding, hard running" approach of Vold's. Both men are excellent wranglers, but Hertzog had learned from Vold's mistakes.

Conclusions reached from this experience are: Most of the horses located in large open areas will be difficult to gather and, once spooked, the horses may travel for many miles before they settle down. Probably all horses will not be captured. Gathering on horseback places stress on the stock being gathered. Colts become separated from their mothers and were out distanced by the rest of the herd. The herd stud prevented the mares from returning to their colts. Roping animals individually is a slow, tedious and dangerous process to both the horses and riders. Injuries are very probable both to the wild horses and to the men and saddle horses being used. Gathering operations will be costly and the scattered occurrences of bands will necessitate many traps or trap locations. Gathering operations will be a long continuing process requiring a constant supply of manpower, material and equipment. People qualified to do this type of work are limited. Special knowledge and experience is necessary for the proper construction of traps, handling of horses, and use of tranquilizers which is not now available in the Bureau.

An economic analysis of the two horse gatherings follows.

First gather May 6-8, 1974, of Harry Vold:

Personnel costs -

Harry Vold - 3 days (estimated 42 hours)	=	$220
4 riders - 3 days (est. 3 x 42 = 126 hrs.)		378

Equipment and horse costs:

Number of saddle horses - 28 x 3 horse days	=	840
Hauling of 28 horses from Fowler, Maybell, Colo., and Cheyenne, Wyo. Cost (5600 horse miles) = 10 cents/mile	=	560
Total Cost		$1,998

Number of horses gathered - 7

Sale of 3 claimed horses	306
Estimated Net Loss	$1,692
(Cost to BLM for care of the 4 stray colts--care and vet cost)	$1,179.51

All but one colt died. Colt that survived awarded to girl in Rawlin's area upon request from Senator MaGee's office.

Second gather of August 5 thru Sept. 6th by Paul Hertzog:

Personnel costs: (3 men)

3 man months x $888	=	$2,664

Equipment and saddle horse costs:

8 saddle horses x 1 month	=	300
Saddle horse vet cost	=	50
Vehicle cost and hauling of horses from Maybell, Colo.	=	600
Temporary corrals	=	400
Ropes and other tac	=	100
Miscellaneous expenses	=	100
Total cost of gather		$4,214

Number of horses gathered - 68

50 claimed horses were sold by Hertzog, verified as owned by Bolten Ranch.

12 colts (privately owned) were given away, verified as owned by Bolten Ranch.

4 branded horses were sold as estrays by the Wyo. Livestock Board.

2 claimed horses were replaced on the Bolten Ranch (privately owned) under license.

Average price of the 50 horses sold by Hertzog was $102 x 50	=	$5,100
Money received from BLM for removing the estrays by Hertzog by contract - 4 x 50	=	200
Total income		$5,300

Summary of Hertzog Gather -

Cost of gather	$4,214
Income from sale of horses, etc.	5,300
Balance	$1,086
Less trespass cost to BLM for the horses claimed over 6 months of age based on 35% National Resource lands	1,084.32

Cost Comparison

Vold gather — Cost - $1,998

Horses gathered:

3 claimed
4 wild colts

7 divided by $1,998 = $285/horse

Hertzog gather — Cost - $4,214

Horses gathered:

68 divided by $4,214 = $62/horse

In conclusion, the development of management plans and implementation of an action program involves the following work:

Complete detailed inventories and update unit resource analyses and management framework plans.

Complete the studies throughout the state that are started on a limited basis to determine: the composition of diet for the horses; the level of competition between horse and cattle, sheep, elk and antelope; the geographic range of horse herds and individual bands; and the migration routes and consistency of use.

Develop and implement wild horse herd management (action) plans for all 26-herd units--including construction and modification of range improvements. Revise allotment management plans as identified in the wild horse action plan.

Gather all free-roaming horses and remove estrays in the 26-herd units.

Remove all excess horses as determined by the environmental analysis, herd management action plans and full public exposure.

Horse habitat management plans are the vehicle that will direct the management, control, and protection of the wild horses for each herd area. They will be developed when sufficient studies and inventories are completed and will be designed to comply with the laws, policies, and guidance of the management framework plans. None have yet been developed in Wyoming, and it may be FY 76 before any adequate plans are completed.

Other external needs exist which should be resolved to facilitate mounting an effective program. Some of these are: Use of aircraft or other means to provide for a more humane method of gathering large numbers of animals in unfenced areas; research related to the population dynamics as it relates to biological and physiological needs of wild horses; guidance on disposal methods including transfer of ownership; adequate funding to implement the Wild Horse and Burro Act; criteria for setting upper limits in population numbers; training of personnel in enforcement; recruitment of personnel having knowledge of horse behavioral patterns.

Accomplishment of the task appears to have insurmountable obstacles, yet adherence to the requirements of the law is mandatory.

The Wyoming State organization intends to continue pursuit of the wild free-roaming horse and burro management objectives to the fullest extent that manpower capability and priority limitations permit.

Presented by Jesse R. Lowe,
Wyoming Associate State Director

WILD HORSES IN COLORADO
(Slide Talk)

by Dale Andrus
Colorado BLM State Director

1. Colorado has never laid claim to a large quantity of wild horses. . . .
2. We do claim quality. . . quality of horses, and of wild horse areas. We intend to maintain that quality.
3. We've shared our wild horses with the public, conducting tours, such as this July trip with Mrs. Johnston from WHOA!
4. And, while we have the typical horse management problems,
5. Colorado prefers to look upon its wild horse population as more of a management opportunity.
6. The Little Bookcliffs herd first reached national prominence in 1968 when over 2500 letters were received from concerned persons urging protection for the animals.
7. By 1969 the Unit Resource Analysis for the land area including the Little Bookcliffs horse and cattle range was completed. By 1970 we had worked up the first Management Framework Plan. The wild horse herd was featured prominently in both planning steps.
8. The Bookcliffs wild bunch may well have been the first of such herds to be incorporated into the BLM planning system. The general public participated and aided the District Manager in his decisions. Keep in mind, please--this was taking place BEFORE passage of the Wild Horse and Burro Act of December 15, 1971.

9. Continuing interest in the horses, the land, and passage of the Wild Horse and Burro Act emphasized that the rugged Little Bookcliffs land area, and its unique resident horse herd merited an intensive yet dynamic management program.

10. Colorado BLM, its citizens, and its law-makers, have long recognized the wild horse as a manageable resource. Senate Bill 208 was passed by the Colorado State Senate in 1969. This Bill provided for both the protection and control of wild horses. During the Senate committee hearing, it was emphasized such horses were to be protected, preserved, and controlled, consistent with the principles of sound habitat management. The Bill did not survive.

11. The same management and control measures are what we seek in our management plan for the Little Bookcliffs horse herd. This is a 100 percent colt crop. The black stud is to the left.

12. Control of numbers was almost taken from BLM hands in 1973 when rules and regulations pertaining to management of wild horses and burros were published. They provided for claiming of unauthorized and/or branded horses. Mr. John D. Hill, a cattle permittee in the Little Bookcliffs, filed a claim for all the horses in the area.

13. This brought us to the negotiating table, and the decision to further intensify management of the range, the horses and the cattle, through separation of cattle and horses.

14. Under the agreement, all wild cattle were removed from the area. Little Bookcliffs is not a manageable area in terms of moving livestock.

15. It is difficult to census cattle and horses. Dense stands of pinon/juniper, and the deep canyons compound the task.

16. After some tense moments and months of negotiation, the licensees and BLM agreed to the division, plus a grazing agreement of the 1974 season. 400 cattle were authorized during April and May. This is a reduction of 222 cattle from the normal operation.

17. Under the agreement, wild horse and livestock use is separated. Horses use the area known as Monument Mesa, Indian Park, and Lane Pastures. These are recognized horse ranges. Livestock will use the southeast portion of Bronco Flats and Pine Gulch, Red Rock, Cosgrove, and Round Mountain Pastures.

18. We received approximately $200,000 for cattle and horse management facilities. Fences, water development, trails, and corrals are included. An allotment management plan is being developed for the cattle areas and we are working on an AMP. The fencing separating the range is wooden--not wire.

19. We used Youth Conservation Corps crews to build the fence. These youngsters really put in a full day. And, another purpose was served.

20. While working on the fence, the students had an opportunity to view the various bands, and to also gain a greater interest in, and an appreciation of, the wild horses.

21. We can rest assured that after many days of long, hot work, those young people are going to insist on protection of those horses.

22. Our rationale for the division of livestock and wild horses was based on consideration of the range and watershed resources.

23. Not only are wild horses and livestock dependent upon those resources, but wildlife as well. With competition from both cattle and horses, the deer herd is declining.

24. Separation of the horses from cattle will provide complete control of each class. And, more importantly, the horses will not be subjected to the interference associated with livestock handling practices.

25. The management program, however, must include some method of control as well as protection of the horses. We do have this gentleman present in the Bookcliffs. Colorado's Division of Wildlife has cooperated in its lion season by restricting permits to male cougars only.

26. A wet season, followed by good grass, followed by a relatively mild winter, blessed the Bookcliffs with an exceptional colt crop. We have an actual count of 15 colts from 26 mares.

27. Our colt crop figures were challenged by some. The slides I'm showing today of colts resulted from that question. I have ordered a halt to the pictures-for-proof project.

28. In the future, those who challenge our census figures will be politely but firmly requested to visit the horse area and spend the time necessary on the ground, to see for themselves.

29. The Bookcliffs bands are unique. Perhaps too much so. Public emphasis is consistently placed in the Bookcliffs, which has fewer horses than our Piceance Basin, Sand Wash, Douglas Mountain and Douglas Creek herds of the Craig District. Horses on the Craig District are estimated at 612, compared with 85 in the Bookcliffs.

(CHART COMMENTS)

30. Beginning last winter,
31.
32. (rapid sequence)
33.
34.

35. And continuing into the summer, the Craig District worked diligently to count horses in the areas mentioned. Efforts were also made to determine if any migrations were taking place due to increased energy-development activity in the area.

36. Counts were made primarily by air, and it should be kept in mind that anyone using the information on counts, sex and production must be aware of the difficulty in coming up with accurate figures. We know our figures are not inflated, and estimate that data for total horses and clots in the Sand Wash and Douglas Mountain herd unit could be within 20 to 30 of actual numbers.

37. There could be a 40 to 60 percent variance in the Douglas Creek and Piceance Basin unit due to dense stands of pinon-juniper.

38. Keep in mind, also--the information we have on production and increase does not consider the yearly mortality of these herds. Wild horse figures must be accepted in the same light as census counts of any wild animal, such as deer, elk, etc.

39. I have attempted to give you a visual impression of our wild horses, and the range they enjoy in Colorado.

40. Our management program--providing reasonable control methods can be employed--should improve both horse herd, and range conditions.

41. Lacking control, natural or otherwise,

42. The range and horses will suffer.

43. Monument Rock lies in the center of the Bookcliffs horse range. To us, it is symbolic. We intend through our efforts, to develop a monument to good land management.

44. We intend, therefore, to proceed with caution and innovation in our wild horse management program in Colorado.

45. From which the wild horse will benefit.

LIGHTS PLEASE

Murderer's Creek Wild Horse Management Plan
Al Oard, Supervisor, Malheur National Forest

Discussed the Murders Creek wild horse situation and possibilities for management. He pointed out that there was reliable data to indicate a 30-percent annual increase in numbers and that control action would be needed soon to keep the numbers in balance with available forage. Mr. Oard's discussion was highlighted by a slide presentation. Each board member received a draft copy of the Murderer's Creek Wild Horse Area Biological Unit Management Plan.

THE RELATIONSHIPS & PROBLEMS BETWEEN BURROS & WILDLIFE & MANAGEMENT ALTERNATIVES

by Lou Boll

BLM DISTIRCT MANAGER - BAKERSFIELD

There has been considerable emphasis placed on the relationships between bighorn sheep and the burro. Because of the magnificance of the bighorn, this attention is probably deserved. We should avoid directing our attention in such a way which will overlook the relationship between all wildlife species which inhabit the same areas as the burro. There are approximately 300 species which should be considered. The significance of these species, individually, may not be as great as the burro or the bighorn, but the overall significance of wildlife populations is certain to be much greater.

Our first consideration in the management of the areas occupied by burros is to determine what factors have the greatest influence on the animal population. At first glance, water would seem to be limiting, especially in the desert areas, but this limits only the areas suitable for use or the seasons of use.

After determining that an area is suitable, the most important limiting factor remaining which we can influence is vegetation. All animal populations are dependent on this vegetation and their productivity is dependent on the quality. In natural plant animal communities there are biological factors which keep populations in balance with their habitat. By introducing a new large herbivore such as the burro, the immediate effect is the reduction of plant nutrients available for transfer to the native consumer species. In this unnatural situation the only thing limiting the burro is the availability of forage. When the population increases to a point where forage is limiting, there are some definite impacts on vegetation and the same type of impacts on wildlife. The first measurable impact is the reduction in the number of species of plants and animals. This is followed by a temporary increase in a few "weed" species, so to speak. For plants, this might be annual grasses. For animals, it may be the deer mouse and horned lark. This, then, is followed by a general decrease in total biomass. In areas where burros occur, their use areas

coincide almost exactly with the important areas for wildlife. The obvious first use area is the vegetation generally found around water holes or springs. This is also used for cover, nesting and food by wildlife.

Another area of importance used heavily by the burro is the dry wash. They use it for the same reason as wildlife--as a travel lane, forage area, shade and protection. The washes are the single most important area for nesting birds. Nests are mostly located in the taller plants such as acacia, palo verde or desert willow, but they will use any type of dense brush. Reductions in vegetation and reduction in wildlife occur in all areas where burros coinhabit the habitat.

The problems facing us now is -- how much of our wildlife are we willing to sacrifice in order to maintain a burro population.

There are several alternatives to be considered in facing this problem. First are areas which could be set aside as burro ranges without regard for effects on wildlife. In these areas our only concern would be that the burro did not destroy his own habitat. It must be recognized that any wildlife populations that do exist in the area will suffer drastic reductions.

The second alternative is where small populations of burros can be maintained at individual water sources. Wildlife considerations for this alternative are:

1. What wildlife population would be eliminated by small amounts of continous burro use?
    a. If so, would the loss be significant in the overall welfare of the species involved?

The third alternative would be a modification of the second. It would involve fencing the water sources and rotating the burro use on a three to four year rotation. Areas suitable to this type situation are probably rare. This type of use may allow vegetation and wildlife population to restore themselves.

The fourth alternative is to limit burro use areas by permanently controling access on some of the water sources. In case of competition with the bighorn this could be an elevation segregation. This is one alternative we would like to evaluate immediately.

By protecting some of the water sources, it would be possible to preserve some of the wildlife habitat.

None of these alternatives eliminate the need to control the burros. The questions remain. How much of our wildlife can be lost? What species can we afford to reduce in numbers? What wildlife habitat areas can we afford to give up?

ANIMAL DISEASES

by Carl M. Rice

RANGE MANAGEMENT SPECIALIST
CALIFORNIA STATE OFFICE, SACRAMENTO

I will briefly cover some of the implications of existing and potential problems of animal diseases in both burros and horses. I am being real general so please don't take some of my material out of context. We can get more specific by individual questions.

Diseases are one of our most serious management problem indicators we have. Often diseases go hand-in-hand with population overcrowding, older animals, poor habitat, and poor forage conditions. Starvation has a direct line relationship with the susceptability of an animal to disease, whether it is a parasite infestation or bacterial infection. Inbreeding can also cause similar problems. Injuries through competition in the breeding process can be another cause for infections not only locally but spreading thru narrow herd units especially with burros.

The suspected outbreak of Equine Dourine on the NWC this summer really pointed out the need for a coordination program between Federal, State, and county agencies. Although there is a definite potential conflict between State and Federal responsibilities and lack of a decision as to the applicability of PL 92-195 on some Federal lands, everyone involved in the ED outbreak in California was interested in getting a top notched job and we proceded to get it done.

The State will furnish qualified vets and processing of any specimens necessary and the Federal agencies (DVNM and NWC) are working hand-in-hand on the actual management program. This ties right into the Early Warning and Detection System that is almost being developed by omosis. If a suspected disease occurs, the applicable people are alerted by the agency or individual discovering the animal or animals with potential symptoms. This has happened twice in California so far and lapse time between the first telephone call and the last was 1½ hours.

Agreed, some diseases build up naturally and the management decision on what to do weighs heavily on the decisionmaker, especially when the impacts of doing nothing or elimination of the diseased animals are unknown at this time.

I believe we can agree that a healthy environment means a healthy population and when this occurs, then our management problem and expendures are a minor item and the manpower and funds can be concentrated on maintaining a healthy environment and the rest will come naturally. This is good economics in anyone's language.

If you have any specific questions on Equine Dourine or other diseases I am sure Dr. Floyd Frank (Idaho) would be glad to answer them later on and Mrs. Tilly Barling will clarify the animal disease happening this summer on the NWC during the general session.

WILD HORSES

by Dean Bibles

BLM District Manager - Susanville

In order to discuss problems in control of populations of wild horses, a base line of knowledge of the population, habitat and terrain must be acquired.

I will discuss the approach taken in California in arriving at some of the conclusions and recommendations which we made. We will discuss range trend, range condition, watershed status or erosion condition, methods of inventory utilized and management problems.

The area considered consists of ten herd management areas within the Susanville District covering some 2,275,000 acres which we believe the the horses inhabited at the time of the passage of Public Law 92-195.

A review of our records depicting the most recent range conditions within these herd areas shows that 91,000 acres amounting to 4% of the area was in good condition; 1,185,000 acres or 52% in fair condition; and 1,000,000 acres or 44% in poor condition.

The range trend information shows 696,000 acres or 31% improving, 1,264,000 acres or 55% static and 319,000 acres or 14% deteriorating. While this data is not current, I think it does give us a base of information to make certain judgments or estimates.

Our watershed or erosion conditions reflect much the same or similar data. Keep in mind that watershed conditions lag several years behind range condition. Recovery of watershed conditions generally takes a considerable amount of time even under sound management practices.

Not reflected by the more general studies are the small critical wet meadows which are the very "life blood" of the cold high desert country. These delicate wet meadows deteriorate rapidly under heavy grazing pressure.

In studying the problems associated with loss of these meadows we can graphically show the rapid loss that occurs once the plants weaken and the soil mantle becomes exposed.

Once erosion starts, the headcut progresses across the meadow lowering the water table which then causes the meadow type vegetation to go out of the picture to be replaced by the vegetation common to dry areas.

Significantly, the major species most critically affected by loss of the meadow habitat is the sage grouse which must have the succulent vegetation to rear its brood. Without this critical part of the life cycle, the sage grouse simply cannot continue to be a part of the fauna.

The adjudicated class I allowable use for livestock is 127,196 animal unit months. Our basic forage inventory indicated 114,350 animal unit months available for domestic livestock, 24,620 animal unit months for wildlife and none allocated for wild horses.

Since the 1974 season has not been completed, I will utilize the data for the 1973 season which was:

51,480 animal unit months	wildlife use
90,846 animal unit months	livestock
31,620 animal unit months	horse & burro
173,946 animal unit months	total use

With estimated total forage production of 138,970, you can see that even though the livestock operators did not utilize some 36,350 which they could have in 1973, we still had an overuse of 34,979 animal unit months.

In order to arrive at these calculations, we first had to determine what use was being made. The livestock use is fairly exacting since the data can be gathered directly from grazing licenses. The wildlife use data is estimated both by B.L.M. and State fish and game biologists and taken from published statistical data with conversions made to livestock animal unit months. Our estimates on the horses was taken from inventory. The 1973 calculations were based on inventories of February 1973 and August 1973. We now have a more recent inventory as of August 1974.

The method utilized for inventory was to grid the areas both geographically and topographically in pre-planning and discuss this grid with personnel involved prior to flying. Data collected included age class, description of the specific animals, location and recording of most bands photographically.

In order to gather the data we felt was necessary, the use of a helicopter was mandatory. We found that we could get near enough the animals to accurately record herd data, yet not unduly frighten them. To the best of my knowledge, with well over 100 flying hours in inventory, we have not caused any injuries to the horses even though at times we have gotten very close to them.

Our February 1973 inventory reflected a total of 1841 which was composed of 191 young and 1650 mature.

The August 1973 inventory showed a total of 2605 composed of 483 young and 2122 mature.

The August 1974 inventory revealed 3328 horses of which 666 were young and 2662 mature.

We have the data on each herd management area. It is apparent that we are experiencing significant increases in total populations during the period observed.

If we are to sustain a healthy environment, it is evident that animal populations must be controlled. The habitat must be protected and managed if we are to carry out our responsibilities for the resources.

Population control of wild horses is not a simple chore and our choices of methods is very limited. Our means of controlling the population at the present time is limited to 1) relocation, 2) removal for private manitenance, 3) destroy in place in a humane manner.

The first two methods require physical handling of the animals. I do not believe that we will be able to accomplish this job with present restrictions.

With the results of some of the claimants in actually catching horses by conventional means, the implication would be that most horses removed from the public lands in the past few years has been with the use of air borne equipment.

If our population expanses as shown since 1973 remain consistent, we could have as many as 500 animals to remove each year in addition to the first removal to bring the population near where it was in 1971.

Once animals are captured, the choice of relocation or private maintenance must be made. We may not relocate to areas where they did not exist as of the passage of the law and the biological niche for relocating very many animals is just not available. I do not believe that relocation will be significant in population control.

Removal for private maintenance could provide an opportunity for finding homes for some of the animals. I rather doubt that on a long term basis with as many as could be produced each year that people would continue to accept responsibility but never be able to actually own the animal. If this approach is taken, I believe that we should make reasonable attempts to follow through to insure that the animals on cooperative agreement are being properly cared for. Many so-called door yard pets are not properly cared for after the first few months and the new has worn off and the $80.00/ton hay is beginning to mount.

Another consideration is that while someone of 12 or 13 who secures a yearling will be ready for college while the animals are still quite young. I think that a change which would allow us to pass title would assist significantly in utilizing private maintenance for excess animals.

The third alternative may be the only viable alternative under the restrictions which we are operating. There is no question as to the distasteful aspects of having to take direct action to hold the population in check but we must give serious consideration to this alternative also. For many of the animals, this would be far more humane than to be subjected to improper care as mentioned earlier. But in addition to the extreme distaste that most people have for killing healthy beautiful horses of

the type we have in Susanville, there is the cold hard fact that shooting horses with a high powered rifle will not be very efficient. After the first few shots, the horses will be harder to stalk than elk during season.

I believe that we can demonstrate that if we could utilize the helicopter in effecting management control and could pass title to the horses, that we would be able to carry out the population control and management of this species.

WILD FREE-ROAMING HORSE AND BURRO MEETING

Forest Service Management Plans and Problems in Nevada
by Orlo Johnson

Wild Free-Roaming Horses and Burros being a part of the "National System of National Forest Lands," our objective, stated very simply, is to maintain a thriving ecological balance on the ranges where these animals exist. If you aren't aware of this fact, this is the first time the Forest Service has had the responsibility for management of a wild animal.

In the three years since passage of the Act, progress in management of these animals and their home range hasn't been as rapid as desired. Progress is being made as we are approaching the management planning phase but problems have also been uncovered.

PROBLEMS

1. Inventory - To manage anything whether it be plant or animal we must know where and when and how much of the subject exists. We have difficulties here in establishing numbers, and the where and when of seasonal migrations. Reference to the Forest Service Wild Horse and Burro Territories on the Nevada State map. Vegetative cover type, topography, wild nature of the animals, mobility are some specific problems on this inventory.

2. Lack of Biological Data - Some of us know much about the needs and the behavior of the domestic horse-we know little about the wild ones. Again to manage an animal we must know of the nature and needs of that animal and his habitat. A management plan developed without good data is a management plan without a reasonable chance for success.

The Forest Service in Nevada is in this phase of the program. We are confirming inventories, and territories and collecting basic data on the animal and his habitat. Refer to the South Monitor territory and population analysis. This data isn't gospel and is only mentioned here as an indicator. Its value is relative only to a single season of data collection.

Total animals	306
Avg. band size	4.2
Colts/100 adults	16.7
Yearlings/100 adults	4.6
Animals in low sage cover type	71%
Animals in P-J type	18%
Herd of 1-3 animals (classified)	39% are male
Herd of 4+ animals (classified)	10% are male

3. Population Control - To manage any animal, population control over that animal is a must. And for a good management system that can be coordinated with other resource uses, we should be able to rotate that use within the boundaries of the established territory. We do not have the means to accomplish this part of the job in this rough country at this time. Practically and safely it cannot be done with existing direction.

In my opinion, these 3 problems are most important in the management of these animals. The first two will only take time, perseverance and a budget. The latter needs reconsideration of existing legislation and this is perhaps most critical in the management of Wild Free-Roaming Horses and Burros.

4. Coordination - There are innumerable problems now known and yet unforeseen in the management of this resource: Paramount to these are competition for space, water and forage between the wild ones, wildlife, domestic livestock and people. The objective of this management planning will be coordinated use and sustained yield on the habitat and an ecological balance on these wild horse territories. We expect it to be difficult but not impossible.

Our people on the Tonopah Ranger District have developed a study plan for the collection of data on this subject. We thought this would be of interest to you and therefore, John Lytle, Range Conservationist, is here with an explanation of that study plan.

The Humboldt National Forest has a rather unique situation in a wild horse management area and one that's been under observation for some time. Darwin Jensen, Ranger at Lamoille, will tell us about the situation on the Cherry Spring area.

WILD HORSES IN THE TONAPAH RANGER DISTRICT

by

John Lyttle - Range Conservationist

With the passage of 92-195, the Forest Service had the responsibility of protection and management of wild free-roaming horses. At the same time we felt we didn't have the data to carry out this responsibility or it was nonexistent. We on the Tonopah Ranger District felt we needed to get and accomplish this information and data before we could write a management plan and this is what we have done to date.

We felt there were three major categories of data necessary if the land manager were to develop and implement a coordinated management plan. These three categories are: Impact on the land itself, impact on other users, and the biology of the horses and burros.

I'll go right in to the biology of the horses and burros, mainly on observation and methods, how we come up with identification of these animals, etc. First, the specific objectives of this plan were to determine territories and population and obtain individual animal identification for the entire Tonopah Ranger District by December 31, 1975.

Second, obtain the remainder of the data outlined in this handout I passed out to be done by the District resources, what's available to us, by December 31, 1976.

Third, to develop and implement management plans based on the data collected for vegetation, soil and water resources and the impact on other users by December 31, 1977.

Fourth, secure interest, financing, and expertise needed to obtain the data which cannot be provided by the District resources. Here, we're going to require help from the University of Nevada, research, and other Forest Service experts, or functional experts, to help us to obtain this data.

And the fifth is to develop and implement a coordinated management plan by December 31, 1978. (Presented a slide program)

SUMMARY OF A PRESENTATION MADE BY DARWIN R. JENSEN, DISTRICT RANGER, HUMBOLDT NATIONAL FOREST, AT THE NATIONAL WILDHORSE ADVISORY MEETING AT RENO, NEVADA 9/19/74.

The wildhorse range at the south end of the Ruby Mountains in Elko Country, Nevada, covers an area of approximately 37 square miles. The area lies within portions of two cattle grazing allotments and one sheep allotment.

The basic objective in management of this wildhorse herd is to provide a thriving ecological balance of wildhorses, wildlife and livestock.

1. Identify areas of probable conflict among wildhorses, livestock, wildlife, recreation and other resource uses, giving emphasis to conflicts where there is competition for forage.

2. Inventory the range to determine vegetative condition and trend, soil condition and trend and get estimates of forage availability. Inventory wildlife in the area and inventory wildhorses.

The wildhorse inventory includes gathering the following information. Description of horses, numbers by age class, birth rate by class, population size and density, mortality rate, age structure of each band and composition of each band by sex.

At the last inventory made of the wildhorse herd 191 horses were inventoried. This is believed to be virtually a 100 percent inventory.

WH&B Advisory Board Meeting
Reno, Nevada
September 19, 1974

Nevada Situation - Presented by R. E. Ferris

Mr. Ferris presented a Nevada map displaying the status of inventories and the distribution of wild horses and burros within the State. Present inventories indicate the population is in excess of 23,000 horses and 1,000 burros. Over 7,000 of these horses have been claimed but only 834 actually captured and removed.

Data relative to horse population increases was presented showing an average increase of 19.6% based upon partial foal crop and approximately 25% increase annually based upon total animal numbers.

Nevada is capturing and banding animals on a limited basis as the opportunity occurs to assist in determining herd composition, seasonal movement, and colt production and survival.

The major objectives in Nevada by job priority and the associated problems were identified and discussed as follows:

Objectives (by priority)	Problems
A. Protection of WH&B's in accordance with P.L. 92-195 and 43 CFR 4700.	1. Vast area involved. 2. Investigation and enforcement. 3. Prosecution and court action.
B. Completion of reliable inventory.	1. Vast area involved and cost in manpower and funds. 2. Importance of season. 3. Supplemental data. Additional cost a. Animal classification b. Photographs
C. Interim population control.	1. EAR or EIS. 2. Capture or control techniques. 3. Disposal of excess animals.
D. Completion of MFP's.	1. Completion Statewide FY 77. 2. Update as additional data available.
E. Development and implementation of activity plans.	1. EAR's or EIS's. 2. Readjudication of forage production. 3. Population control. 4. Construction of management facilities.

Mr. Ferris also discussed an interim management proposal for wild horses and burros. This proposal would identify priority areas within the State for future management and allow the public to evaluate the trade-offs made to provide for each wild horse or burro herd management area. A copy of this proposal was provided each Board member.

WILD HORSES IN OREGON

by
Don Gipe
Chief, Branch of Range, Watershed and Wildlife
Oregon State Office, BLM

I'm going to give you a very short rundown on Oregon generally, population summaries, etc., and then Chris Vosler, our District Manager in Burns, will give you a slide presentation on the East Kiger herd that Mr. Turcott mentioned this morning and the gathering that is in progress there.

We started out in 1971 with our first inventory at 2,941 head. Granted, this was not a thorough inventory. There was not as much time spent on it as there should be and, of course, we didn't have as good a technique as we have now, but the 1974 inventory showed 5,728 head total. We have concentrated on identifying colts during these inventories and these vary from 15 percent to as high as 28 percent in certain areas. One report we have from the Lakeview District, they really concentrated on doing an excellent job there and they used helicopters in the survey, they showed in 1974 a 28 percent colt crop with a total increase of only 19 percent. This does show that there is some death loss out there. We feel this particular inventory is extremely accurate and we doubt that there's going to be very much additional numbers found other than normal increases.

We have prepared one herd management plan for Oregon and that is in the Burns District; it's the one Chris will talk about. We are in the process of preparing three or four additional plans. These are going to to be on the areas in which we have the primary problem. We don't have, as everyone has mentioned, the manpower or the funds to do the job that we really feel needs to be done. So all we can do is to hotshot some of this and hopefully keep from getting into too bad a shape until the manpower and funds are forthcoming.

We've had 24 claims filed in Oregon for 1,208 horses. These were filed in the 3-month period following the development of the regulations and the numbers have increased since that time. That is, the actual herd increases. . .the claimed horses are increasing right along with the wild ones.

We've had several attempts at gathering, primarily with two different operators. One of them had 130 head claimed and he worked for 5 days and gathered 106. That's not too bad considering the success that many others have had in there. One of the primary reasons for this is that these horses, the majority of them, had been gathered periodically over the years and turned back out so they were used to coming into the corral.

The other operator has a claim for 230 head and he worked for 7 days with a group of good horse wranglers, they've been in the horse business for many years, and he gathered 20 head in that 7-day period.

We've had two or three other claims, one and two head, that have gone out and gathered the animals. These were mostly gentle animals that got away and were claimed during the claiming process.

As everywhere else during our adjudication process, the horses that were out there were not considered in the allocation of forage, only wildlife and domestic livestock, primarily. We considered these horses in trespass and we encouraged the owners to remove the horses.

The problem comes up of how do we go about reducing the livestock numbers under our appeals procedures without a new forage inventory. This takes a lot of time and a lot of effort and we simply do not have the resources to do this.

We're fortunate, I think, in Oregon, for the most part, and we certainly have areas that are critical, we've had a series of pretty good years and our horse population increases have not really resulted in a deterioration of the area yet. I want to emphasize that this is not true throughout the total State. There are areas that are critical and Chris will talk about that today. Our primary conflict is between big game and the wild horses, both antelope and deer. This is what we know about them. We really don't know how much conflict there is between the sage grouse and the horse populations and between the many other forms of wildlife that are out there.

We have had some problems. We had some horses lost last year where they got into a new area that they hadn't been in, they were not familiar with the area, the water ran out, and they died. Several of them died and we had to shoot a few. These are some of the things we are going to have to face and in order to prevent that kind of thing we're going to have to do a better job of surveillance and again, funds and manpower limit that kind of surveillance.

We've got problems with bighorn sheep and wild horses in one area in Oregon. This is along the Owyhee Breaks next to the Owyhee River. The conflict is not too great at present but we know from past experience that this is an excellent horse area, they multiply very rapidly and there've been gatherings out of there over the years beginning around World War II and following of several thousand head in this particular area. The last gathering, I believe, was in 1967 or 8 when the ranchers gathered out of there. There are still some 230 head in that area. Another example of what we consider quite reliable inventory in that particular area, they inventoried it in February by helicopter and they came back about a month ago and reinventoried it and came up with only a difference of only two adult animals.

We've got a number of areas in which the horses are moving into that they did not inhabit prior to the passage of the Act. In one particular area the herd increased from our initial inventory of 80 head to a little over 200 head and, again, part of that is a result of improved inventory, but they have moved out, about 80 of them have moved out of the area in which they inhabited in 1971 to an area where there has been no wild horses for at least 10 years. We've got a number of areas in the Vale District that the same thing is happening. Some of this resulted from last year being a dry year, shortage of water, and horses moved out to new areas to find water. During that period, again in the Vale District primarily, there was quite a conflict between domestic livestock and horses during the short water period. The horses would actually drive the cows away from the water and so the cows, restricted to the use of water, had to be taken out early.

We've got one area in the Bailey's Butte unit of the Lakeview District in which there's obvious competition between the antelope and the wild horses. We don't know just why, but the antelope are moving out of this area pretty heavily. We don't have any specific figures, but the Game Commission inventories show a reduction in antelope in this particular location. Again, when the gatherings are complete and all the claimed animals are taken out of the area then we'll be back to a point where we can live with it for a short time.

I think that the most serious problem that we have right now, and this is going to be a continuing problem, is in the John Day River area where we've got some 250 head of horses and again this inventory is not anywhere near complete. The public land in that area varies from about 10 percent to about 40 percent. It's a real bad situation. All of these horses have been claimed and the claims approved by us and the

Oregon Brand Inspector, but gathering is going to be something else. It's real rough country similar to some the Forest Service was showing this morning and it's impossible, even I think with a helicopter, to gather all of the horses out of that particular area. Unless we can get a cooperative agreement with the ranchers in that area we are going to have to eliminate the horses from where they are using the private land. Someone this morning mentioned the problems we would run into in trying to shoot the animals. I agree wholeheartedly that even though it might be acceptable to the public it's going to be a tremendous job to try to clean them out that way. I believe it will be virtually impossible.

Conflicts at present are primarily in the Burns District. We've got several areas in that District where we've got severe competition between big game, deer winter ranges, and horse populations. Also in this area we've got a heavy obligation of livestock and something's got to give.

We have closed most of the areas in Oregon to the licensing of domestic horses. We feel that this is absolutely essential to the disposition of any branded livestock that may be in there and there's a lot of them, I'm sure, that will be branded simply because the owners have either left the country or they decided not to put in a claim because of the problems involved and the trespass charges, etc. In one particular case there was an area that had 125 head of horses in. There's no question in our minds or in the minds of the brand department as to who those horses belong to, but this individual decided not to file a claim because we restricted the gathering by prohibiting the use of aircraft and he felt he could not do the job without it and he didn't want to take on the burden of trying.

Chris Vosler, District Manager, Burns, Oregon gave a slide presentation on the roundup of excess horses now underway in the East Kiger Gorge allotment. The District Manager gave each board member a copy of the wild horse management plan that provides for maintaining a viable herd of wild horses in this allotment.

DAILY AND SEASONAL MOVEMENTS OF FERAL BURROS (Equus asinis) in the Havasu Resource Area, Colorado River Valley, California--Arizona

by Dr. Robert Ohmart
Assisted by Ms. Susan Woodward and Mr. Rick Seegmiller
Arizona State University

The immobilizing drug, M-99, has been used successfully to capture feral burros in the Havasu Resource Area. A dosage of 2.25 mg M-99 combined with 30.0 mg Azaperone has proven effective on all age classes (except very young colts, which were not immobilized by drugs) and has resulted in no deleterious side-effects. Drugged burros were immobile within a mean of 10 minutes (range = 3-30, n = 33) following injection with the drug and were back on their feet about 6 minutes after intramuscular injection of the antidote, M50-50 (4.5 mg). M 50-50 injected intravenously gives a much quicker response in that burros are mobile within 45-55 seconds.

All captured burros 6 months of age or older were eartagged and fitted either with color-collars or radio-bearing collars. Two one-month colts, being too small for collars, were only eartagged. Standard measurements were taken on all animals; weights and ages were estimated. In addition, blood and fecal samples were collected for analysis. There are presently one jack and one jenny instrumented with radios on each side of the Colorado River. In the Bill Williams Mountains (Arizona) study site, there are 7 color-collared burros; 6 in the Aubrey Hills (Arizona) near the south end of Lake Havasu; and 25 in the Trampas Wash area of the Chemehuevi Mountains (California).

Capture data, a skull collection and field observations permit a preliminary description of the population structure of feral burro herds. This information is summarized in Tables 1 - 2.

Skulls were gathered from the deserts on both sides of the Colorado River within and without the Havasu Resource Area. Most came from near the Imperial National Wildlife Refuge (Arizona) north of Yuma, Arizona, or from the Aubrey Hills south of Lake Havasu City, Arizona. The clumping of skull finds and the young age of many of the dead animals leads us to believe that most are the remains of burros shot before Public Law 92-195 went into effect, and that the collection, therefore, represents a more or less random sample of the total population. Ages of captured animals and of burro skulls were

estimated, according to a dentition chart for horses and mules. At about 3 years, tushes erupt in the male, allowing the determination of sex in the skull collection. It is not clear at this time at what age sexual maturity occurs in wild burros. Females less than one year old have been observed copulating. One collared female with an estimated age of 2½ years had a one-month old colt. Since the gestation is approximately 365 days, she must have conceived when about 18 months old.

Skull data show the eldest animals to be males and suggest that differential mortality during the reproductive years may lead to the imbalanced sex ratios observed.

Movements of burros marked in the Chemehuevi Mountains (California) have been monitored since late January 1974. Although definite conclusions must await further data, some generalizations and tentative statements can be made. The distance covered by a burro in a single day is often less than a mile. This is especially true in cool weather or after rains when the burros do not have to travel to the Colorado River for water. It is usually possible to relocate a burro in the morning within 0.5 to 1.0 miles of where it was last seen the evening before.

Burros spend most of their time on the interfluves. Major washes, at least in the cool seasons, appear to be the main avenues for travel to the Colorado River. If water is available in springs, tenejas or arroyo channel sands, burros do not go to the river to drink. Now that these are dry, when the burros visit the river, very little time is spent in the riparian vegetation (mesquite-tamarisk). After a trek of over a mile to the river, they have been observed to stay at the river's edge for less than 10 minutes. This pattern, of course, may change during summer months.

There has not been enough time yet to determine seasonal distribution patterns or annual home ranges. A shift toward the river with prolonged drought and the onset of hot weather is indicated in both the aerial surveys and ground observations.

Quantitative appraisal of the diet of burros is not yet available. Fecal analysis is being conducted by R. M. Hanson at Colorado State University and over 70 samples have been sent to Dr. Hanson's laboratory. Field observations show a reliance on cured annuals (especially Plantago) throughout the winter and spring months. In the spring, burros supplemented this diet with greening shrubs and flowering forbs. They have been seen to take the

following perennials with apparent relish: Fouquieria splendens, Lycium andersonii, Ambrosia dumosa, and Krameria grayi. Coridium floridum is a minor element in their diet at this time of year. (The several head of cattle in the area seem to rely more heavily on palo verdes than do burros.)

Considerable damage is done to ocotillo, which has its stems broken and bark (including thorns) stripped; but no plants seem to have been killed by concentrated browsing. Instead, the ocotillo apparently responds by branching and giving a denser, thornier appearance, which may discourage further browsing.

In many instances Ambrosia is closely cropped and stunted, if not destroyed. However, only the new growth and flowers of Lycium and Krameria are removed. With annuals, the whole plant, including roots, is consumed. Lupinus sp. is avoided and possible Cryptantha sp. also. Encelia is a species which is definitely ignored, if not avoided. Table 4 gives a tentative listing of the flora of the Trampas Wash area and indicates those species which burros have been observed eating.

Attention has been paid to any type of social behavior among burros which might influence their distribution or density. So far no definite sign of territoriality or dominance on the part of a jack has been observed. This may be in part due to the large number of indistinguishable gray males. Additional collaring will hopefully remedy this situation.

In general, males travel singly or in small groups of 2 - 5 animals. This breaks down when a female is in estrus and as many as 20 males may attend and copulate with her. Jennies remain alone with their colts or in a jenny group composed of 2, seldom 3, jennies and their colts. During the month of May, it should be noted, this general pattern has changed and larger jenny groups and mixed groups have been seen. This may be due to a restriction of movements and hence increase in population density to within 1-2 miles of the Colorado River, presently their only water supply. It remains to be seen if the larger herds are usual in the hot, dry summer months.

Analysis of body measurements from immobilized adults indicates there are no significant differences between sexes in either California or Arizona. Further, there are no significant differences in body measurements between the populations that were sampled in California versus Arizona.

Renewal of our contract will allow Susan Woodward to continue full-time field studies on burros in the Trampas Wash Area from July 1, 1974 to June 30, 1975. Richard Seegmiller is currently living in the Bill Williams Mountains and will be there until August 20, 1974. He will return in December (1974) and remain until June 30, 1975. Both are examining behavior, movements and food habits of burros in their studies and Seegmiller will concentrate on bighorn sheep/burro interactions when the sheep begin to lamb in January and February.

TABLE 1

Age Classes and Sex Ratio According to Skull Data

Age	Males	Females	??	Total
< 1 year	-	-	8	8
2 years*	-	-	7	7
3	2	1	3	6
4	1	1	-	2
5	3	1	-	4
6	0	1	-	1
7	0	1	-	1
8	0	0	-	0
9	0	2	-	2
10	2	0	-	2
11	0	1	-	1
12	0	0	-	0
13	1	0	-	1
14	2	0	-	2
15	2	0	-	2
16	1	0	-	1
17	0	0	-	0
18	1	0	-	1
Total	15	8	18	41

*Sexes cannot be determined from dentition until about 3 years of age.

TABLE 2

Age Classes and Sex Ratios According to Capture Data*

	Males	Females	Both Sexes
6 mos - 1 yr	2	4	6
1 - 2 yrs	8	2	10
3	5	4	9
4	4	3	7
5	2	3	5
6	0	1	1
7	2	1	3
8	0	0	0
9	0	1	1
10	0	0	0
11	1	0	1
Totals	24	19	43

*Not a random sample since adults were selectively captured and marked.

TABLE 3

Age Classes and Sex Ratios According to Field Observations

A. Ground Observations

		Males	Females	??	Total
Colts	<1 yr	4	5	3	12
Adults	>1 yr	21	15	-	36
	Total	25	20	3	48

B. Aerial Observations (April flight 1974)*

		Males	Females	??	Total
Colts	<1 yr	0	0	29	29
Adults	>1 yr	0	0	115	115
	Total				144

*From fixed-wing aircraft, yearlings might be classified as adults.

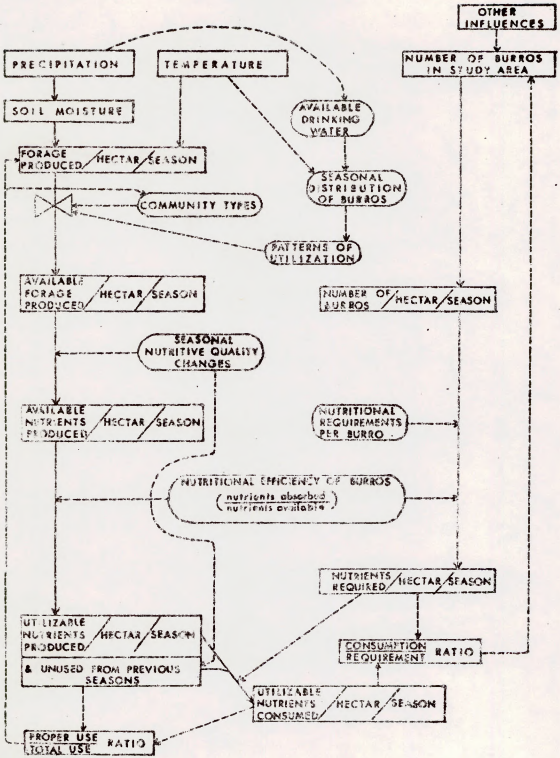
Ward Brady
Division of Agriculture
Arizona State University
Tempe, AZ 85281

Research Summary for Analysis of Carrying Capacity of Feral Burro Habitat in the Havasu Resource Area, Arizona.

Research has been initiated in cooperation with the Bureau of Land Management on analysis of carrying capacities of desert ranges for Feral Burros. The attached figure illustrates some of the major variables under study and some of the interrelationships between variables.

Variables under the most intensive study include forage production in relation to environmental parameters, distribution of plant community types over the landscape, and nutritive quality of desert forage species. Dr. Clayton Haugebak, of Arizona State University, has initiated research on Nutritional Efficiency of Burros. All research is being done in cooperation with Dr. Robert Ohmart and information from his studies will be used in the carrying capacity model.

Simulation studies based on a more complex model similar to that illustrated in the figure will be used in the analysis of long term carrying capacities of desert ranges.


OTHER INFLUENCES
PRECIPITATION
TEMPERATURE
NUMBER OF BURROS IN STUDY AREA
SOIL MOISTURE
AVAILABLE DRINKING WATER
FORAGE PRODUCED / HECTAR / SEASON
SEASONAL DISTRIBUTION OF BURROS
COMMUNITY TYPES
PATTERNS OF UTILIZATION
AVAILABLE FORAGE PRODUCED / HECTAR / SEASON
NUMBER OF BURROS / HECTAR / SEASON
SEASONAL NUTRITIVE QUALITY CHANGES
AVAILABLE NUTRIENTS PRODUCED / HECTAR / SEASON
NUTRITIONAL REQUIREMENTS PER BURRO
NUTRITIONAL EFFICIENCY OF BURROS
nutrients absorbed / nutrients available
NUTRIENTS REQUIRED / HECTAR / SEASON
UTILIZABLE NUTRIENTS PRODUCED / HECTAR / SEASON
& UNUSED FROM PREVIOUS SEASONS
CONSUMPTION / REQUIREMENT RATIO
UTILIZABLE NUTRIENTS CONSUMED / HECTAR / SEASON
PROPER USE / TOTAL USE RATIO

United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

JUN 27 1974

Memorandum

To: Members, National Advisory Board on Wild Free-Roaming Horses and Burros

From: Secretary of the Interior

Subject: Call to Meet

Secretary of Agriculture Earl L. Butz and I have called a meeting of the National Advisory Board for Wild Free-Roaming Horses and Burros in Reno, Nevada, on September 18-20, 1974.

You will be advised of further details by the Director, Bureau of Land Management.

Rogers C.B. Morton

United States Department of the Interior

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NATIONAL ADVISORY BOARD ON WILD FREE-ROAMING HORSES AND BURROS

Notice of Meeting

Notice is hereby given that the National Advisory Board for Wild Free-Roaming Horses and Burros will hold a meeting on September 18, 19, and 20 at the Holiday Inn, 1980 East 6th, Reno, Nevada, beginning at 8:30 a.m. The agenda for the meeting will include:

September 18—An aerial field trip southeast of Reno to view wild horse and burro management problems. The Advisory Board will leave Reno at 7 a.m. and is scheduled to return to Reno at 5 p.m. Since this tour is primarily by air, no provisions have been made for the general public to participate in the field trip.

September 19—(1) Introduction and welcome; (2) Public comments; (3) BLM management plans and problems with wild horses and burros in the States of Wyoming, Colorado, California, and Nevada; (4) Murderer's Creek Wild Horse Management Plan, Forest Service; (5) Forest Service management plans and problems in Nevada.

September 20—(1) Research projects; (2) Agency reports on (a) Report to Congress, (b) Oversight hearing, (c) Research and research needs, (d) Advisory Board administrative matters.

The meeting will be open to the public. Time has been set aside from 4 to 5 p.m., September 19, for brief statements by members of the public. Those persons wishing to make an oral statement must inform the Advisory Board Chairman in writing prior to the meeting of the Board. Any interested person may file a written statement with the Board for its consideration. The Advisory Board Chairman is Dr. C. Wayne Cook. Written statements may be submitted at the meeting or mailed to Dr. Cook % the Director (330), Bureau of Land Management, Washington, D.C. 20240.

Additional details can be obtained by contacting the Office of Public Affairs, Bureau of Land Management, Federal Building, Room 3008, 300 Booth Street, Reno, Nevada 89502.

Minutes of the meeting will be available for public inspection 60 days after the meeting at the Office of the Director (330), Bureau of Land Management, Interior Building, Washington, D.C. 20240.

GEORGE L. TURCOTTE,
Associate Director.

JULY 19, 1974.

[FR Doc.74-17126 Filed 7-25-74;8:45 am]

Appendix No. 17

IN REPLY REFER TO:

1214 (330)

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

AUG 5 1974

Memorandum

To: Deputy Assistant Director, Resources

From: Director

Subject: Delegation of Authority--September 1974 Meeting of the Wild Horse and Burro Advisory Board

Pursuant to the authority delegated to me by the Secretary of the Interior, I hereby delegate to you authority and responsibility to act as the authorized representative of the Secretary at the September 18-20 meeting of the joint National Advisory Board for Wild Free-Roaming Horses and Burros.

Curt Berklund

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UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

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REPLY TO: 2260 Wild Free-Roaming Horses and Burros July 15, 1974

SUBJECT: USDA Representative to Sixth Meeting of National Advisory Board for Wild Free-Roaming Horses and Burros

TO: Director, Bureau of Land Management

I will be unable to attend the Sixth Meeting of the National Advisory Board for Wild Free-Roaming Horses and Burros on September 18-20, 1974. Mr. Hallie L. Cox will attend in my place and I have delegated to him my responsibilities as official representative of the Department of Agriculture at this meeting.

FRANK J. SMITH
Director of Range Management

SUBJECT: Minority Report of Velma B. Johnston, member of the National Advisory Board on Wild Free-Roaming Horses and Burros, opposing action taken by the Board at its meeting in Reno, Nevada, September 18-20, 1974, that resulted in a recommendation for amendment to Public Law 92-195.

MOTION: Whereas helicopters are recognized as an essential and humane tool in management of wildlife throughout the world;

Now, therefore, be it resolved that the National Wild Horse and Burro Advisory Board urges the Secretaries, and through them the Congress of the United States, to modify the Act in a manner which will allow the use of motorized equipment and helicopters under direct supervision of the Secretaries or duly authorized official or employee of the Departments in management of wild horses and burros. (This resolution was part of a larger resolution as originally proposed. It was later separated from the original motion and was voted upon separately.)

The resolution as written sets forth the necessity for removal of wild horses and burros from public lands in order to make more forage available for food-producing animals in the face of shortage of food for human consumption; and in order to reduce and control the numbers of these animals that use of aircraft be allowed through amendment to existing legislation.

The vote I will make to that resolution as it has been presented to the board will cast me in the role of a person not caring whether the world eats or not, and I do care. I would like to see our ranges back like they belong. Included in that resolution, however, is the one thing I cannot support. I want it perfectly understood that my "no"

vote on that resolution is solely because the provision to restore the use of aircraft is included in that resolution. Please understand that. I want to point out, too, at this point that everything is being zeroed in on the wild horses and burros. Under the Multiple-Use Act, there are many, many other uses that are going to affect our public land resource and drastically affect the domestic livestock interests. It just happens the wild horses are the scapegoats at this point. I want to make very clear my position that I do not believe solving this situation on wild horses is going to save the public lands. Not unless other encroachments upon them are likewise given the same public attention and the same undue pressures that this particular issue has been subjected to. I will support the reduction and designation of specific areas if that part of the resolution is presented separately from the recommendation for restoration of use of aircraft.